

CHILTON'S

MOTOR AGE

November, 1958



INSTRUMENTS

DON'T GUESS



Also in this Issue: Automotive Service League Shop of the Month—page 39

Techniques of Shock Absorber Selling—page 46; Plastic Solder Repairs—page 60

Why 2-in-1 chrome rings mean double life for pistons, cylinders, rings!

Perfect Circle engineering and research make possible 2-in-1 sets tailored for top performance in each make and model engine

TOP CHROME COMPRESSION RING

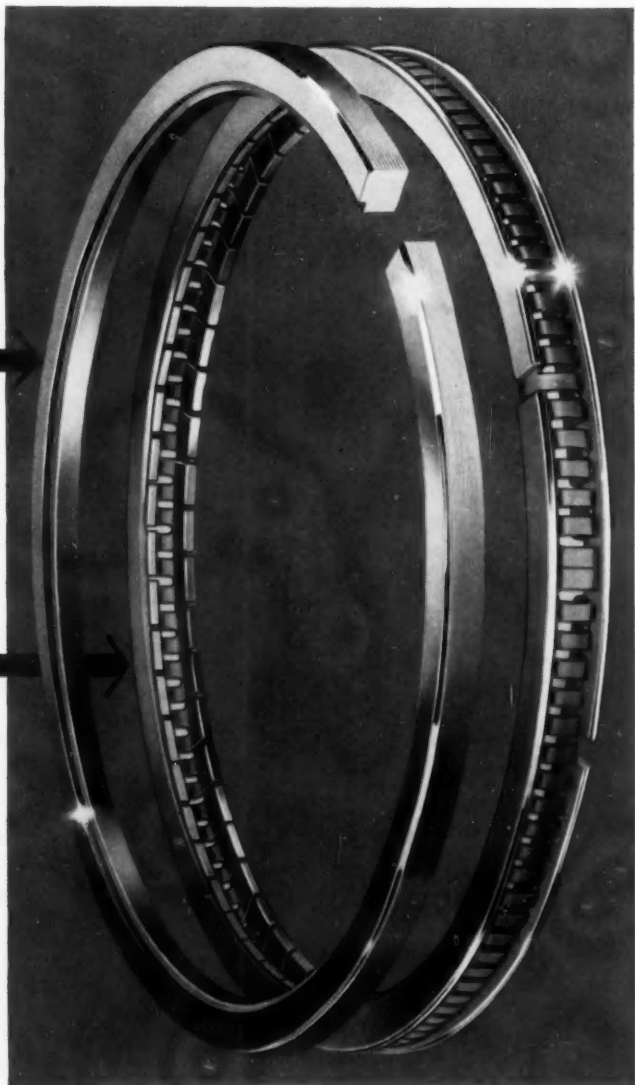
is specially designed to perform where pressures are greatest, heat highest, lubrication poorest. Special face finish assures quick seating to eliminate tedious break-in and assure customer satisfaction. For top performance characteristics are modified depending on make and model of engine.

TYPE "98" CHROME OIL RING

is designed to provide positive oil control for today's high compression engines. Self expanding spacer assures uniform pressure against cylinder wall, plus side-sealing action on ring groove. Some 2-in-1 sets contain the famous Chrome Oil Stopper oil ring, others the "98" oil ring, depending on make and model of engine.

INSURE CUSTOMER SATISFACTION

When you do a valve or ring job, install Perfect Circle Valve Seals. They stop a type of oil loss that even the best piston rings can not control.



PERFECT

PISTON RINGS AND



CIRCLE

POWER SERVICE PRODUCTS

Hagerstown, Indiana

Don Mills, Ontario, Canada

ANOTHER BLUE STREAK
SECRET SERVICE TIP FOR YOU

SHERLOCK McKANICK and MIKE

...The Case of the
Tell-Tale Fingerprints...

KEEP YOUR DIRTY HANDS
OFF THOSE NEW BREAKER
POINTS, MIKE!

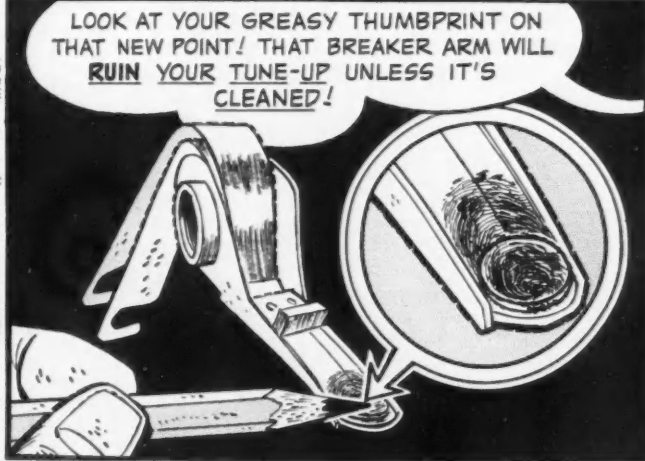


GOLLY,
SHERLOCK,
WHAT'S
WRONG?

ELEMENTARY,
MIKE...



LOOK AT YOUR GREASY THUMBPRINT ON
THAT NEW POINT! THAT BREAKER ARM WILL
RUIN YOUR TUNE-UP UNLESS IT'S
CLEANED!



O.K.
I'LL GET
A RAG.

**NO, MIKE! NEVER USE AN
ORDINARY RAG ON NEW OR OLD
POINTS. INSTEAD, CLEAN THE
CONTACTS WITH CARBON TET.
THEN JUST BLOW OFF
LOOSE DUST. NOW,
IN DRESSING OLD POINTS
USE A SPECIAL POINT
FILE LIKE THE
BLUE STREAK
TF-1.**



LISTEN TO MY
ENGINE **PURR-R**
MIKE, YOU'RE A DOLL!



MECHANICS: FOR ADDED SERVICE
HINTS GET FREE BULLETIN (No. 70-52)
"HOW TO CLEAN BREAKER POINTS."
BECOME A **BLUE STREAK** DEALER
AND GET ALL THE
FACT-FILLED BULLETINS
PLUS NEW ONES AS
THEY ARE ISSUED.



WRITE: STANDARD MOTOR PRODUCTS, INC.
37-18 NORTHERN BOULEVARD
LONG ISLAND CITY 1, NEW YORK

THANKS TO **BLUE STREAK**
SERVICE BULLETINS, NO
WONDER 40,000 SUCCESSFUL
DEALERS SAY, "BLUE STREAK
IS BETTER FOR YOUR BUSINESS!"

WORLD'S FOREMOST
HEAVY-DUTY
IGNITION LINE

BLUE STREAK

REGULATORS • SWITCHES • COILS • CONDENSERS • WIRE AND CABLE • CONTACT POINTS

"...makes one-stop closings a matter of course..."

says **ED EISENHAUER**, President of the Ed Eisenhauer Motor Co.,
Dodge-Plymouth and DeSoto dealer of Grand Junction, Colo.

"I worked for COMMERCIAL CREDIT for 14 years, so when we wanted a finance connection I was able to look at the problem from both sides of the fence. I picked COMMERCIAL CREDIT PLAN because it has wide public acceptance and is flexible enough to cover practically every financing requirement. COMMERCIAL CREDIT PLAN makes one-stop closings a matter of course, with the car sale, financing and insurance handled right in our sales room. Credit investigations and decisions are made quickly, enabling us to take full advantage of selling opportunities. Incidentally, more than 50% of our body work has been directed to us as a result of the insurance provisions of the plan."

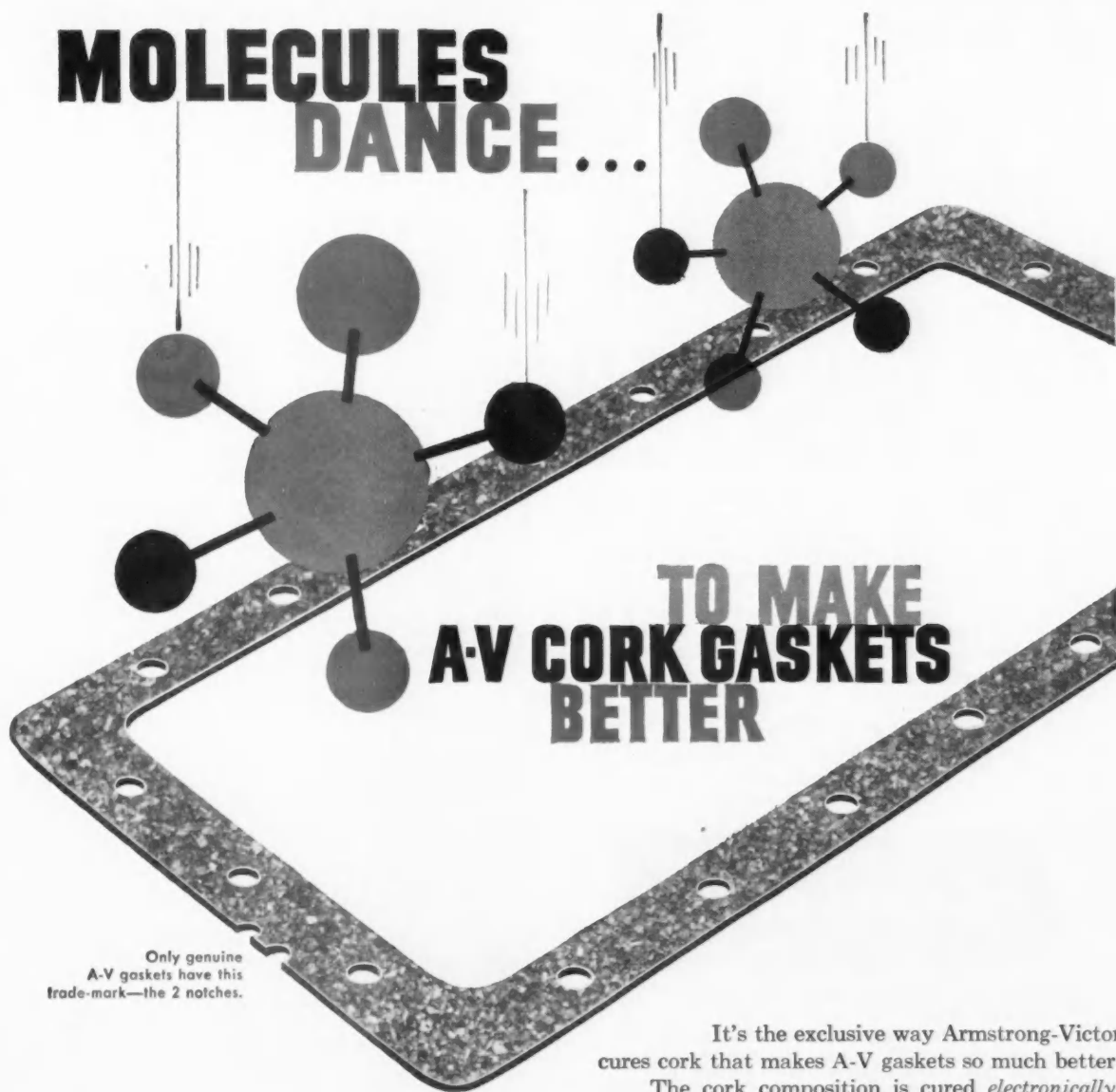
Commercial Credit dealers are successful dealers

Write or call the nearest COMMERCIAL CREDIT CORPORATION office for complete information on the benefits of COMMERCIAL CREDIT PLAN. Why not do it, today?



A service offered through subsidiaries of the
Commercial Credit Company, Baltimore . . . Capital
and Surplus over \$200,000,000 . . . offices in principal
cities of the United States and Canada.

MOLECULES DANCE...



Only genuine
A-V gaskets have this
trade-mark—the 2 notches.

It's the exclusive way Armstrong-Victor
cures cork that makes A-V gaskets so much better.

The cork composition is cured *electronically*.
That means it gets a high-frequency "hot-foot" that makes
the cork molecules "dance" into a denser, stronger structure
—while the heat cures the cork from the inside out.

Electronically baked cork never loses resiliency, is never scorched or
under-cured, as is often the case with steam-cured cork.

RESULTS: A-V cork gaskets are stronger, more flexible, and resistant to breakage. They
make tighter, longer-lasting seals. And A-V precision die-cutting and accurate, clean
punching make these gaskets easy to apply. If you take pride in your work, you'll like
A-V cork gaskets. Your Victor Jobber carries complete stocks—in sets or individual parts.

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SERVICE FOR YOUR B&D TOOLS



For genuine Black & Decker repairs check Yellow Pages under "Tools-Electric" for address of nearby Black & Decker

FACTORY SERVICE BRANCH

Free tool inspection when requested • Genuine B&D parts used • Factory-trained technicians handle all work • Standard B&D Guarantee at completion of recommended repairs • Fast service at reasonable cost.

Or write for address of nearest of 48 branches to:
THE BLACK & DECKER MFG. CO., Dept. S5211, Towson 4, Md.



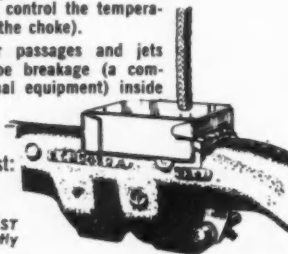
- 1 By providing the RIGHT AMOUNT of air to the automatic choke.
- 2 By providing that right amount of air at the RIGHT TEMPERATURE (original heat tube and other choke heaters cannot control the temperature of this air feeding to the choke).
- 3 By preventing plugged air passages and jets which result from heat tube breakage (a common occurrence with original equipment) inside the exhaust manifold.

Check the BPS "NO" List:

NO DRILLING! NO TAPPING!

NO OBSTRUCTION TO EXHAUST GAS FLOW! (which creates costly back pressures)

NO MANIFOLD SPLITTING! (from expansion and contraction differences of cast iron and steel due to extreme temperature changes)



\$5.95
LIST

Engineered to the specific manifold — air-tight fit with the patented BPS asbestos seal — engineered Stoves not drilled bolts or simple heat tubes — mounted outside of manifold (not inside where heat is most intense and breakage chiefly occurs).

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SPECIALTY**

For All Popular Cars—SEE YOUR JOBBER

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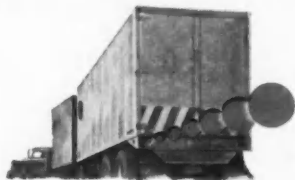
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HEAVY DUTY FLASHER

... FOR
*10,000,000 trucks plus**

The new Tung-Sol Heavy Duty Flasher has a service-rated life of *twice* that of any other type. It can be used to flash one to six lights without a perceptible change in the flashing rate. It provides for instantaneous four-lamp emergency warning and it will replace 95% of the flashers now in use. This new flasher will provide more positive action and greater dependability in any service for which the vehicle is presently wired. Made in the universal form, it can be used in either a plug-in or screw terminal installation.



Get the full story and sales aids from your Tung-Sol representative. Announcement to your fleet accounts will produce immediate volume sales. Electroswitch Division, Tung-Sol Electric Inc., Newark 4, New Jersey.



*Plus boat and car trailers, buses, taxicabs and even passenger cars.

6 and 12-Volt Types

6-Volt—#535 flashes from one to six 21cp lamps

12-Volt—#534 flashes from one to six 21cp or 32cp lamps



ts TUNG-SOL® — *First in Flashers*



MOTOR AGE MEMO

There's Work to be Done and Money to be Made

IT'S an established fact that there is work to be done in the automotive service business. And, there's money to be made. Profits for those who manage their businesses well, who are able and equipped to repair or to prevent the need for repair on today's vast population of motor vehicles.

Nationwide motor vehicle registrations have multiplied faster than rabbits. It says so in the new edition of "Automobile Facts and Figures" published by the Automobile Manufacturers Assn. For instance, the total number of registered vehicles is up more than 53 per cent in the past 10 years. In 1949 there were 44.6 million vehicles on the road. Today, a whopping 68.5 million! Rather, that's the estimated figure for 1958 year's end.

Another fact, not supplied by AMA, is that 1959 marks a special year for the auto service business. In 1955 nearly 8 million cars were built. Next year, that fabulous figure enters the class of cars which are over three years of age. That's when service is needed and bought.

That's when you must be ready, willing and able to make money.

Likes and Dislikes

Ford Motor Co. took some grass roots soundings on its new products. It invited 400 representative car buyers to its Ford Consumer Conference.

What conference members liked best about today's cars were:

1. The over-all appearance—the "good looks" of today's cars.
2. The ease of handling today's cars.
3. The dependable performance of the cars they drive.
4. The riding comfort which these cars provide.
5. The safety features which are being incorporated into automobiles today—including increased visibility.

What bothers them most:

1. Continuing upward price trends.
2. They see a need for a small, low-priced, economical American made car, used chiefly as a second car.
3. They are greatly concerned about low gasoline mileage in modern cars, especially where tax authorities find it easy to increase gasoline taxes.
4. They wonder what has happened to "pride of workmanship."
5. They wonder why all the emphasis upon horsepower and speed when in their daily use of the cars in their home communities they have no need for this extra power and speed.

Faithfully yours,

Frank P. Tighe

NEW! EASY! PROFITABLE!

Exide WINTER-START BATTERY INSURANCE

(ON ANY BATTERY REGARDLESS OF MAKE OR AGE)

GIVE YOUR CUSTOMERS
ONE OF THESE POLICIES

MAKE MONEY THESE
THREE WAYS

YOU START OR WE COME OUT AND START YOU!

Exide

WINTER-START INSURANCE POLICY

- This policy certifies that the authorized Exide dealer, listed below, has made a thorough and careful examination of the battery presently installed in your automobile.
- This battery, having passed dealer inspection, or having been brought up to the dealer's high standard for battery efficiency is now **GUARANTEED BY THE DEALER** to be fit for COLD WEATHER SERVICE until March 31, 1959.
- Issuance and acceptance of this EXIDE WINTER-START INSURANCE POLICY guarantees the holder one **FREE SERVICE** call (one **FREE START**) should the policy holder's car fail to start due to battery breakdown during the guarantee period.
- Free service call is offered only in dealer's normal operating zone and during regular operating hours.
- Obviously, the Exide dealer issuing this policy cannot be liable for service charges the policy holder may pay to other dealers or for other expenses or damages.
- Keep this policy in your car. It is the only item needed to get Exide's **GUARANTEED WINTER-START Service**. No free service can be given without it.
- For best starting results and continuous trouble-free driving, have your battery Exide-checked at least once a month.

HAPPY STARTING!

CAR OWNER'S NAME
ADDRESS
MAKE OF CAR YEAR BRAND OF BATTERY
DEALER'S SIGNATURE
DEALER'S ADDRESS
PHONE DATE

PLEASE GIVE THIS POLICY TO YOUR EXIDE DEALER
AFTER YOU HAVE RECEIVED FREE WINTER-START SERVICE

1. GET NEW CUSTOMERS

People love something free, especially car-owners. They'll line up at your station for Exide's free insurance policy and other things you sell. And 65,000,000 readers will see Exide's big ads announcing this profit-packed promotion that puts sales punch behind normal services you already perform.

2. SELL MORE RECHARGES

If a battery is okay and looks good, you insure it for winter. If the battery needs charging, you pocket the profit. *Then* it's eligible. Facts: 4 out of 10 batteries need charging — and one needs replacing.

3. SELL NEW BATTERIES

If a charge won't take, you've got a new battery sale on the spot. If a battery you've insured goes dead (unlikely since you've checked it) you get the car started—something you'd do anyway for a customer. Of course, you'll take along a new Exide.

Exide means business!

Contact your Exide Distributor for the
free Winter-Start Promotion Kit.



When it's an

You start...making money!

1959 Tune-up—Alignment Specifications

MAKE AND MODEL	ENGINE		TUNE-UP DATA										FRONT END ALIGNMENT			
	No. of Cylinders Bore and Stroke (In.)	H.P.	Spark Plug Make and Size (mm)	VALVES				IGNITION				Steering Axis Inclination (Deg.)	Caster (Deg.)	Camber (Deg.)	Toe-In (In.)	
				Seat Angle		Operating Tappet Clearance		Breaker Point Gap (In.)		Cam Angle (Deg.)	Spark Plug Gap (In.)					Timing Occurs ° T.C.
				Inlet (Deg.)	Exhaust (Deg.)	Inlet (In.)	Exhaust (In.)	Steering Point Gap (In.)	Steering Point Gap (In.)							
AMERICAN MOTORS CORP.																
Rambler 6-5902, 5904, 5904-1, 5906, 5906-1	6-3 1/2 x 4 1/4	90	CA-14	45	45	.016C	.018C	.016	32	.035	3B	8	0 to 1 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
..... 6-5910	6-3 1/2 x 4 1/4	127	CA-14	45	45	.012H	.014H	.016	32	.035	5B	6 11'	0 to 1 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
..... 6-5920	6-3 1/2 x 3 3/4	215	CA-14	30	45	.012H	.014H	.016	30	.035	TC	6 11'	0 to 1 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
..... 6-5960	6-4 x 3 3/4	270	CA-14	30	45	Hyd	Hyd	.016	30	.035	5B	6 11'	0 to 1 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
CHRYSLER CORP.																
Chrysler 8-MC1-L	8-4 1/2 x 3 3/4	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MC2-M	8-4 1/2 x 3 3/4	325	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MC3-H	8-4 1/2 x 3 3/4	350	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MC3-H (300-E)	8-4 1/2 x 3 3/4	380	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
De Soto 8-MS1-L	8-4 1/2 x 3 3/4	290	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MS2-M	8-4 1/2 x 3 3/4	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MS3-H	8-4 1/2 x 3 3/4	325	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MS3-H (Adventurer)	8-4 1/2 x 3 3/4	350	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
Dodge 6-MD1-L	6-3 1/2 x 4 1/4	135	AL-14	45	45	.010H	.010H	.020	39	.035	2 1/2 B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 6-MD2-L	6-3 1/2 x 3 3/4	255	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MD3-L	8-4 1/2 x 3 3/4	295	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MD3-H	8-4 1/2 x 3 3/4	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-D-500	8-4 1/2 x 3 3/4	320	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
Imperial 8-MY1-L, MY1-M, MY1-H	8-4 1/2 x 3 3/4	350	AL-14	45	45	Hyd	Hyd	.017	30	.035	10B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
Plymouth 6-MP1-L, MP1-M	6-3 1/2 x 4 1/4	132	AL-14	45	45	.010H	.010H	.020	39	.035	2 1/2 B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MP2-L, MP2-M, MP2-H	8-4 1/2 x 3 3/4	230	AL-14	45	45	.010H	.018H	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-MP2-P	8-4 1/2 x 3 3/4	260	AL-14	45	45	.010H	.018H	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-Golden Commando	8-4 1/2 x 3 3/4	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	7 1/2 B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
FORD MOTOR CO.																
Edsel 8-57F, 58D, 63F, 64C, 71E, 71F	6-3 1/2 x 3 1/2	145	Ch-18	45 1/2	45 1/2	.019H	.019H	.025	37	.034	4B	6 1/2	1P to 2P	1/4 P to 1 1/4 P	1/4 to 1/4	
..... 8-57F, 58D, 63F, 64C, 71E, 71F	8-3 1/2 x 3 1/2	200	Ch-18	45 1/2	45 1/2	.019H	.019H	.015	27	.034	.....	6 1/2	1P to 2P	1/4 P to 1 1/4 P	1/4 to 1/4
..... 8-57H, 58B, 63B, 71E, 71F, 76E	8-4 x 3 1/2	225	Ch-18	30 1/2	45 1/2	Hyd	Hyd	.015	27	.034	.....	6 1/2	1P to 2P	1/4 P to 1 1/4 P	1/4 to 1/4
..... 8-Power Option	8-4 1/2 x 3 1/2	303	Ch-18	30 1/2	45 1/2	Hyd	Hyd	.015	27	.034	.....	6 1/2	1P to 2P	1/4 P to 1 1/4 P	1/4 to 1/4
Ford 6-Custom 300, Fairlane, Fairlane 500	6-3 1/2 x 3 1/2	145	Ch-18	45 1/2	45 1/2	.019H	.019H	.025	37	.034	4B	6 1/2	0 to 1P	1/4 P to 1 1/4 P	1/4 to 1/4	
..... 8-Custom 300, Fairlane, Fairlane 500	8-3 1/2 x 3 1/2	200	Ch-18	45 1/2	45 1/2	.019H	.019H	.015	27	.034	3B	6 1/2	0 to 1P	1/4 P to 1 1/4 P	1/4 to 1/4	
..... 8-Special Option	8-4 x 3 1/2	225	Ch-18	60 1/2	45 1/2	Hyd	Hyd	.015	27	.034	3B	6 1/2	0 to 1P	1/4 P to 1 1/4 P	1/4 to 1/4	
..... 8-Power Option	8-4 x 3 1/2	300	Ch-18	60 1/2	45 1/2	Hyd	Hyd	.015	27	.034	3B	6 1/2	0 to 1P	1/4 P to 1 1/4 P	1/4 to 1/4	
..... 8-Thunderbird	8-4 x 3 1/2	300	Ch-18	60 1/2	45 1/2	.025H	.025H	.015	27	.034	4B	.....	1/2 P to 1 1/2 P	1/4 P to 1 1/4 P	1/4 to 1/4
Lincoln 6-All	8-4 1/2 x 3 1/2	350	Ch-18	30	45	Hyd	Hyd	.015	27	.034	6B	7 26'	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
Mercury 8-Monterey	8-3 1/2 x 3 1/2	235	Ch-18	45 1/2	45 1/2	.019H	.019H	.015	27	.032	2B	7	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-Montclair	8-4 1/2 x 3 1/2	322	Ch-18	30 1/2	45	Hyd	Hyd	.015	27	.032	6B	7	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
..... 8-Park Lane	8-4 1/2 x 3 1/2	345	Ch-18	30 1/2	45	Hyd	Hyd	.015	27	.032	6B	7	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
GENERAL MOTORS CORP.																
Buick 8-4400	8-4 1/2 x 3 1/2	250 3	AC-14	45	45	Hyd	Hyd	.015	30	.033	5B	7	1 1/2 N	1/4 P	1/4 to 1/4	
..... 8-4600, 4700, 4800	8-4 1/2 x 3 1/2	325	AC-14	45	45	Hyd	Hyd	.015	30	.033	12B	7	1 1/2 N	1/4 P	1/4 to 1/4	
Cadillac 8-60, 62, 75	8-4 x 3 1/2	325 4	AC-14	44	44	Hyd	Hyd	.016	30	.035	5B 5	4	1 1/2 N to 1 1/2 N	1/4 N to 1 1/2 P	1/4 to 1/4	
Chevrolet 6-1100, 1500, 1700	6-3 1/2 x 3 1/2	135	AC-14	31	46	Hyd	Hyd	.019	32	.036	TC	7 11'	1 1/2 N to 1 1/2 P	0 to 1P	1/4 to 1/4	
..... 8-1200, 1600, 1800	8-3 1/2 x 3 1/2	185	AC-14	46	46	Hyd	Hyd	.019	30	.035	4B	7 11'	1 1/2 N to 1 1/2 P	0 to 1P	1/4 to 1/4	
..... 8-Engine Option	8-4 1/2 x 3 1/2	250	AC-14	46	46	Hyd	Hyd	.019	30	.035	4B	7 11'	1 1/2 N to 1 1/2 P	0 to 1P	1/4 to 1/4	
..... 8-867	8-3 1/2 x 3 1/2	230	AC-14	46	46	Hyd	Hyd	.018	30	.036	4B	4	1 1/2 P to 2 1/2 P	1/4 N to 1 1/2 P	0 to 1/4	
Oldsmobile 8-88	8-4 x 3 1/2	270	AC-14	45	45	Hyd	Hyd	.016	30	.030	5B	10	0 to 1N	1/4 N to 1 1/2 P	0 to 1/4	
..... 8-88S, 98	8-4 1/2 x 3 1/2	315	AC-14	45	45	Hyd	Hyd	.016	30	.030	5B	10	0 to 1N	1/4 N to 1 1/2 P	0 to 1/4	
Pontiac 8-5921, 5924	8-4 1/2 x 3 3/4	245	AC-14	30	45	Hyd	Hyd	.016	30	.036	6B	4 50'	1N to 2N	1/4 N to 1 1/2 P	0 to 1/4	
..... 8-5927, 5928	8-4 1/2 x 3 3/4	260	AC-14	30	45	Hyd	Hyd	.016	30	.036	6B	4 50'	1N to 2N	1/4 N to 1 1/2 P	0 to 1/4	
STUDEBAKER-PACKARD CORP.																
Studebaker 6 Cyl.	6-3 x 4	90
..... 8 Cyl.	8-3 1/2 x 3 3/4	180

ABBREVIATIONS

1—Left only; right, 1/4 to 1/4 P.
2—1958 production model.

3—When equipped with automatic transmission.

4—Eldorado models, 345.

5—Eldorado models, 7 1/2 B.

AC—A. C. Spark Plug Div.

AL—Electric Auto-Lite Co.

B—Before top center.

C—Cold.

CA—Champion or Auto-Lite.

Ch—Champion Spark Plug Co.

H—Hot.

Hyd—Hydraulic valve lifters.

N—Negative.

P—Positive.

TC—Top center.



you have these BIG* advantages

handling...

● *You make sales more easily* because AC Spark Plugs are original equipment on more new cars than any other brand.

● *You save time* because AC's simplified numbering system tells you thread size and heat range at a glance.

● *You have complete market coverage* because the AC Spark Plug line includes types for all applications including resistor and extended tip designs.

● *You find stocking and selling is simpler* with AC's exclusive 8-Pack replacement set packaging.

● *You please more customers* with AC Spark Plugs—engineered for high-compression

engines. AC is the acknowledged leader with more spark plug design improvements than any other manufacturer.

● *You get the maximum selling help* from AC Spark Plug advertising and point-of-sale merchandising support—the industry's most comprehensive programs.



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Studios' ZORRO every
week on ABC-TV

HOT TIP SPARK PLUGS

AC SPARK PLUG  THE ELECTRONICS DIVISION OF GENERAL MOTORS

Chilton's MOTOR AGE, NOVEMBER, 1958

When you know the facts you'll want
to stock and sell AC Spark Plugs!



Factory equipment on Chevrolet, Oldsmobile, Buick, Pontiac and Cadillac Cars and on Chevrolet and G.M.C. Trucks. Specially engineered for all other makes of cars, trucks, tractors, marine and aircraft applications.

TEAMWORK



that pays off
in
SATISFACTION



Satisfied user customers who benefit from superior filtration . . . Satisfied car dealers, garage owners and service station operators who see filter sales and profits improve steadily . . . there's the double pay-off in WIX Prescription Filtration.

YOU'RE MISSING ONE OF TODAY'S BIG PROFIT OPPORTUNITIES IF YOU ARE NOT SELLING WIX PRESCRIPTION FILTRATION

WIX Technical Development goes hand-in-hand with Automotive Service in the advancement of oil and air filtration . . . technical progress and progress in the area of greater earnings. WIX shows the way with Prescription Filtration to best suit the individual engine, and advanced merchandising that **GUARANTEES BOTH SALES AND PROFITS.**

WIX

Prescription Filtration



POROSITE
Pleated Type for
Lube and Fuel
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**WIX-KNIT
PREMIUM TYPE**
for Full-Flow
Oil Filtration



"SPIN-ON"
Standard
on America's
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Depth Type for
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The WIX Line
gives you full
coverage . . . lu-
bricating oil, fuel
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tridges — foreign
cars, too!



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*Get the facts from
your jobber—then
get the Line for you
and your customers.*

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GASTONIA, N. C.

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Raybestos LININGS

lick ^{heat} HEAT and WEAR brake problems
for your customers . . .

build a bigger brake service business for you!

New improved Raybestos Linings can bring you your share of the booming brake service business. Thanks to new materials and manufacturing processes, these linings give your customers the six vital performance characteristics they need: *greater heat resistance, greater fade resistance, increased braking power, longer life, really quiet operation, positive safety.*

Available bonded or riveted for every make and model car, Raybestos Brake Linings work equally well for both power and manually operated brakes. So take advantage of this opportunity to build a bigger brake service business. Always put Raybestos linings on your customers' cars.



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- A technical sound motion picture in color showing details on
- Hydraulic systems
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Raybestos 7 POINT BRAKE CHECK

includes adjustment.

1. Pull front wheels, inspect linings
2. Check brake drums
3. Inspect front wheel bearings
4. Clean brake assembly
5. Check hydraulic system
6. Adjust brakes or recommend reline
7. Road test brakes

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Ask your Raybestos jobber for full details today

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AMERICA'S BIGGEST SELLING FRICTION MATERIAL

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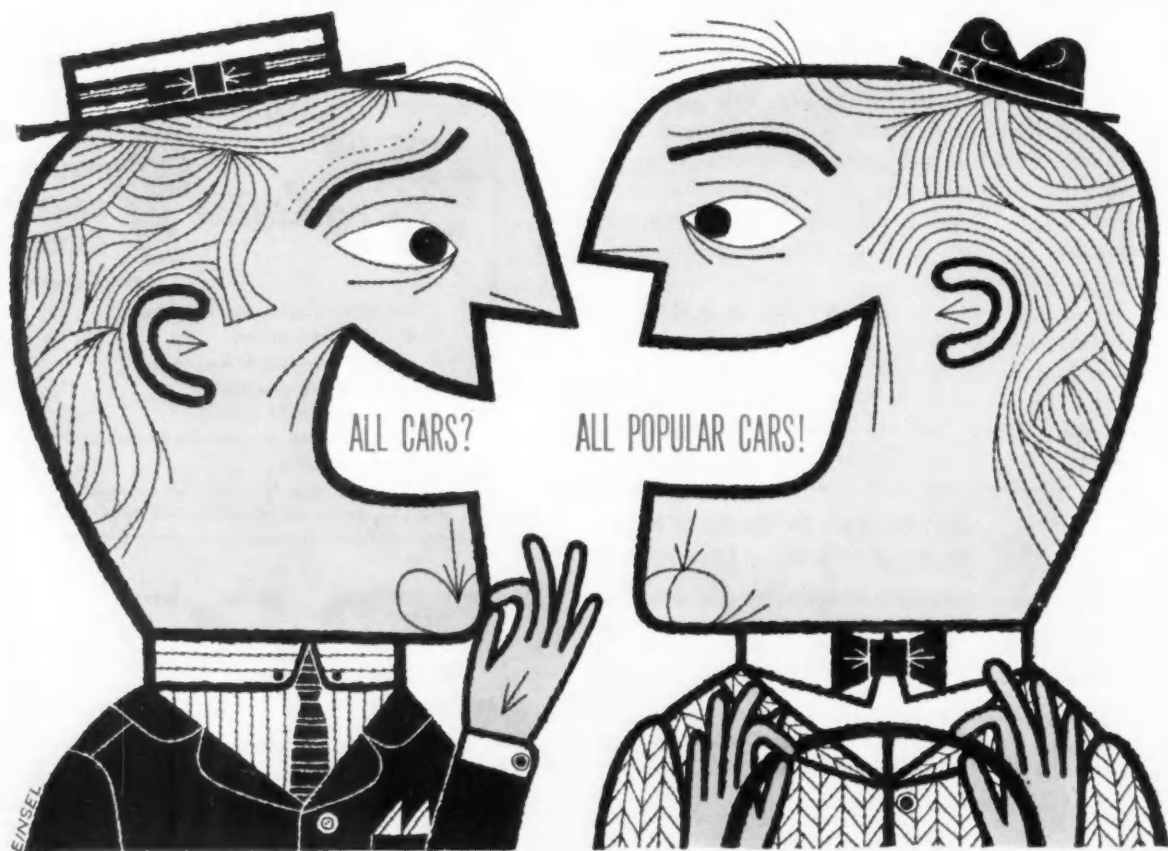
Enjoy your own set of three 8 x 10 photos of Jimmy Bryan, George Amick and Johnny Boyd—1st, 2nd and 3rd in the 1958 Indianapolis "500"—and their cars. Send \$1.00 (to cover handling and postage) to Raybestos, with name and address.

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THE FIRST TIME DELCO-REMY... TO SERVICE AMERICAN CARS!

Delco-Remy's new expanded line of electrical system service parts makes headline news for jobbers, service outlets and customers alike. Now for the first time owners of *all* popular American cars can enjoy the quality and reliability of parts from Delco-Remy—world's largest original equipment manufacturer of automotive electrical systems.

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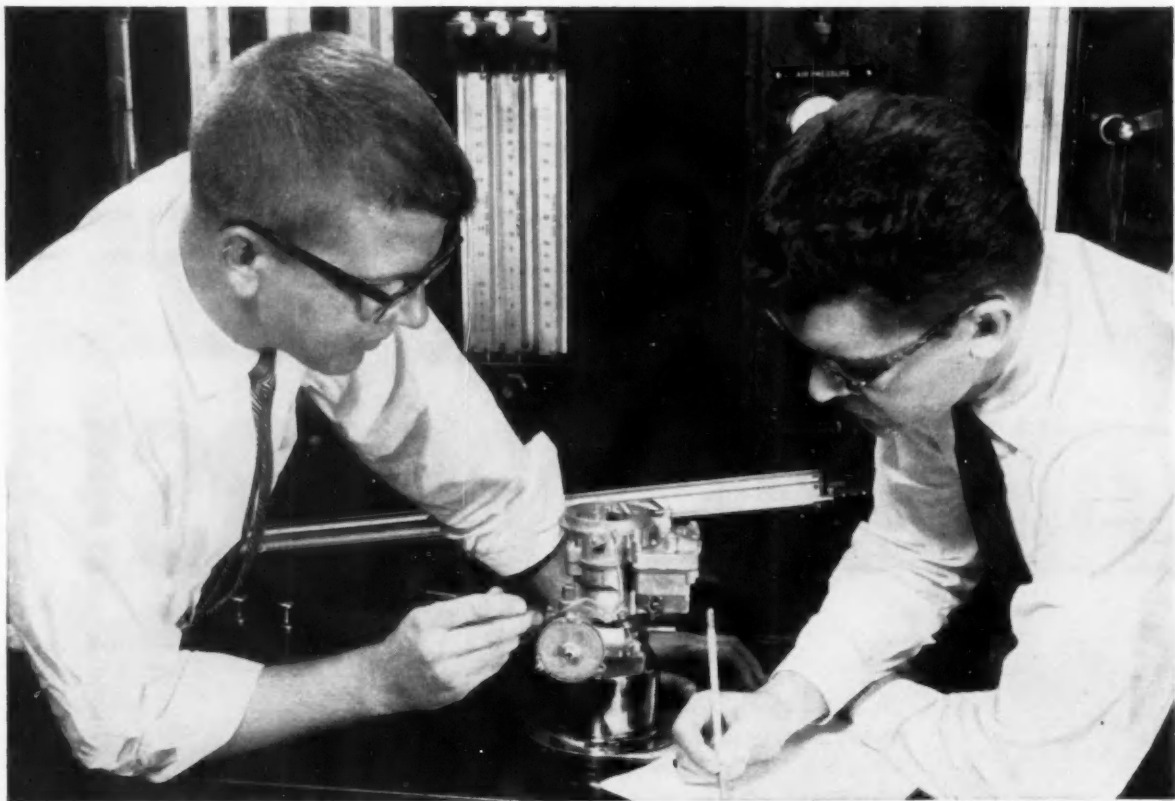
DELCO-REMY

DIVISION OF GENERAL MOTORS

ANDERSON, INDIANA

The man who sells
OLDSmobility in '59

has the features with new sales appeal!



**NEW TWO-STAGE AUTOMATIC CHOKE
MAKES FUEL ECONOMY NEWS...**



**Another sales exclusive
from Olds engineering!**

Good news for Olds salesmen, as Oldsmobile continues its leadership in the field of big-car fuel economy! Starting with the Econ-O-Way Carburetor, Oldsmobile has set the industry pace in fuel economy. For 1959, Olds introduces a new two-stage automatic choke that cuts choke operation by 75% . . . provides a more efficient gas-air ratio during engine warm-up! The new choke gives gas-savings of up to 25% in cold-weather, short-haul driving (where most of the driving is done before the engine is fully warmed up). Teamed with the thrifty Econ-O-Way Carburetor, it makes the Dynamic 88 the economy leader of the medium price class! A fact that's going to make plenty of sales-sense to Olds prospects . . . just one more reason why it's great to be an Oldsmobile Quality Dealer.

OLDSMOBILE

DIVISION OF GENERAL MOTORS CORPORATION • LANSING, MICHIGAN

OVER A MILLION CARS NOW IN LUCITE®

Use Du Pont LUCITE . . . the original "Magic-Mirror"™*

finish for all acrylic lacquer repair work

For several years increasing numbers of cars have come off production lines finished in Du Pont LUCITE Acrylic Lacquer. Now 1959 models are swelling the total many times, to give more millions of new car buyers beauty, durability, and

ease of maintenance not possible before the introduction of LUCITE.

The result for refinishers is much more repair work in LUCITE. And thanks to the simplified procedures and complete range of colors offered by Du Pont, it's

easy for any refinisher to duplicate all the characteristics of the factory finish known as "Magic-Mirror."™ So for repair of all cars in original acrylic lacquer, use the *original* Du Pont LUCITE Acrylic Lacquer. See your Du Pont refinish jobber.

*General Motors' name for Acrylic Lacquer.



Now all General Motors cars are being finished in exciting acrylic lacquer. Original Du Pont LUCITE is available in matching colors for all years, all models.



LUCITE ACRYLIC LACQUER

the finish with a future

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

1958 New Passenger Car Registrations by Makes by States

STATE AND MONTH	Buick	Cadillac	Chevrolet	Chrysler	De Soto	Edsel	Ford	Imperial	Lincoln	Mercury	Oldsmobile	Packard	Plymouth	Pontiac	Rambling	Studebaker	Misc. Dom.	Foreign	Total
Alabama Aug.	285	84	1391	43	34	127	15	1168	13	23	120	321	374	199	132	33	6	436	4,810
8 Mos.	2614	788	11566	423	365	944	316	8882	94	162	1025	2691	6	2906	1671	974	216	14	2512
Arizona Aug.	70	54	748	27	54	127	24	479	11	19	83	90	1	192	93	90	7	285	2,371
8 Mos.	799	481	5178	204	133	428	214	3224	79	160	572	979	12	1344	795	664	96	1	2171
Arkansas Aug.	109	55	906	22	21	47	18	693	5	8	69	154	4	230	99	88	16	167	1,734
8 Mos.	1290	494	7027	189	175	626	164	5899	38	92	701	1596	16	1824	1139	569	211	1	905
California Aug.	831	1132	8397	386	257	1072	198	7078	113	175	1030	1361	16	2844	1122	1445	214	1	7087
8 Mos.	10572	10141	77889	3587	2609	9322	2441	56175	1364	2262	8114	13513	171	24851	11478	9453	1780	15	46284
Colorado Aug.	115	96	1329	55	35	136	21	812	11	22	118	199	3	313	171	258	37	2	495
8 Mos.	1488	718	9905	433	301	1141	326	6735	104	200	1198	1910	16	2648	1522	1671	285	18	2970
Connecticut Aug.	133	137	1302	68	54	164	29	1227	13	21	170	303	5	561	244	301	57	9	954
8 Mos.	1791	1273	11124	742	511	1352	411	8984	143	300	1204	2707	36	4549	2225	2252	452	4	6259
Delaware Aug.	49	33	480	20	13	37	12	308	3	3	38	65	1	171	66	38	5	122	1,464
8 Mos.	464	293	3524	172	138	278	98	2166	25	52	317	686	6	1299	547	263	68	734	11,150
Dist. of Columbia Aug.	43	46	528	51	16	69	3	311	8	2	55	89	1	213	77	84	7	272	11,815
8 Mos.	503	515	3837	229	183	493	44	2652	93	85	411	847	13	1583	743	367	66	29	1550
Florida Aug.	526	479	2921	125	108	314	50	2686	41	89	383	725	4	1073	495	422	72	2	2359
8 Mos.	5276	4165	26666	1034	847	2130	719	21111	468	969	2826	6120	42	7676	3902	3031	588	15	14792
Georgia Aug.	263	176	2077	61	55	177	30	1675	13	15	153	360	6	613	295	192	42	865	7082
8 Mos.	3313	1376	17974	598	417	1363	366	14948	122	243	1436	4051	38	4619	3174	1339	413	36	5234
Idaho Aug.	42	30	334	14	15	34	10	264	7	6	45	72	1	102	85	112	19	147	1,338
8 Mos.	641	323	2784	152	113	357	141	2140	49	85	444	747	10	976	759	776	174	10	11,815
Illinois Aug.	1079	757	7408	294	195	487	133	5355	57	102	886	1662	12	2124	1142	1142	213	16	1174
8 Mos.	14091	7241	66590	2582	2445	1089	43585	728	1543	6646	17447	169	17296	11670	8872	2120	282	7000	217,188
Indiana Aug.	489	257	2999	130	109	270	88	2526	24	58	379	769	17	958	558	515	169	2	526
8 Mos.	6116	2418	23753	1093	1006	2334	1069	19546	295	514	2657	7259	138	7199	4570	3188	1793	33	3101
Iowa Aug.	227	99	1966	80	40	177	36	1627	10	17	181	314	1	508	333	227	47	10	209
8 Mos.	2930	947	16140	625	396	1415	485	13119	102	183	1697	3510	19	3906	3005	2011	505	53	1343
Kansas Aug.	279	47	5281	65	52	176	46	510	2	8	63	60	1	151	99	95	24	235	1,896
8 Mos.	2944	936	14181	594	475	1367	535	11732	109	216	1446	3071	32	3539	2692	1803	469	17	1844
Kentucky Aug.	193	84	1274	42	50	133	28	949	13	17	143	266	3	395	218	95	26	8	194
8 Mos.	2174	1713	10353	351	272	845	354	7401	75	147	1164	2538	25	2825	1741	765	204	55	1090
Louisiana Aug.	171	154	1605	33	23	95	28	1268	7	15	157	394	3	339	202	105	36	1	392
8 Mos.	2373	1049	15368	391	279	997	344	11985	103	224	1347	3611	15	2967	2468	688	266	23	2595
Maine Aug.	72	22	446	16	10	46	6	510	2	8	63	60	1	151	99	95	24	235	1,896
8 Mos.	831	317	4284	155	108	317	161	3915	28	62	521	782	13	844	781	239	1	1617	15,868
Maryland Aug.	229	156	2302	145	68	296	16	1528	16	14	211	361	6	870	313	325	53	1	699
8 Mos.	2687	1156	17971	864	653	1968	379	11838	168	197	1527	3119	32	6257	2797	1653	388	14	3946
Massachusetts Aug.	284	223	2124	119	96	237	26	2010	17	28	213	512	3	828	332	606	48	841	8,547
8 Mos.	4217	2188	19515	1126	1013	2374	464	17141	239	481	2107	5765	45	7851	3486	4891	496	87	8886
Michigan Aug.	826	577	6150	172	173	607	165	4474	28	109	899	1354	6	1865	993	73	149	108	20,891
8 Mos.	9669	4915	48060	1746	1779	4709	2299	37357	418	1202	7065	13613	63	13558	8204	6268	1041	38	7391
Minnesota Aug.	316	119	2184	111	78	209	91	1894	37	37	259	407	15	786	454	374	108	40	331
8 Mos.	4141	1375	19646	922	742	1977	710	15591	196	335	2231	5048	56	6023	4029	3201	940	144	2072
Mississippi Aug.	139	50	951	24	19	52	8	739	8	5	69	165	1	194	152	72	22	173	2,835
8 Mos.	1588	432	7344	220	189	454	157	5851	54	89	480	1591	6	1502	1235	438	193	5	911
Missouri Aug.	362	209	3089	71	77	315	39	2227	17	33	236	467	5	633	412	290	84	2	549
8 Mos.	4557	1940	26268	777	862	2350	568	19538	217	356	2106	5248	46	7055	4126	2167	708	11	3385
Montana Aug.	83	37	485	22	13	36	26	366	8	4	56	78	1	153	91	124	41	2	166
8 Mos.	902	320	3451	165	114	402	172	2680	52	77	461	904	7	1002	656	770	232	9	879
Nebraska Aug.	92	52	1164	39	27	115	31	1026	2	10	116	176	2	324	155	120	29	1	153
8 Mos.	1438	557	9106	348	179	771	196	7390	74	135	947	1812	21	2297	1507	942	250	56	1102
Nevada Aug.	14	11	96	3	7	13	8	96	3	5	21	30	3	37	22	17	4	76	455
8 Mos.	161	191	1138	83	82	159	110	1009	26	65	211	313	8	379	288	90	72	895	5,300
New Hampshire Aug.	48	22	362	16	7	19	1	263	3	8	23	49	1	125	40	71	10	1	175
8 Mos.	411	214	2824	116	87	289	83	2123	21	51	284	445	9	896	481	643	128	2	1327
New Jersey Aug.	522	476	3723	319	193	454	66	3279	60	64	403	839	8	1564	627	516	103	4	1519
8 Mos.	6569	4638	33040	2773	2020	4315	1077	22668	659	877	3498	8755	107	13823	6370	4453	1065	20	9660
New Mexico Aug.	70	45	487	27	23	71	15	377	1	10	62	118	2	153	74	78	12	162	1,787
8 Mos.	812	297	4064	194	161	428	184	2811	52	89	497	926	8	1037	738	468	124	2	970
New York Aug.	1263	1168	8818	521	397	999	153	6731	104	167	1140	2302	19	1378	1461	1487	257	307	3605
8 Mos.	16686	10891	73558	5893	4162	9821	2039	53303	1343	2157	8716	25356	222	26720	14733	10872	2995	826	29610
North Carolina Aug.	310	155	1718	78	77	158	29	1839	7	13	168	407	4	855	290	179	58	1	436
8 Mos.	3289	1278	13127	627	561	1967	367	13480	100	189	1201	3554	35	3852	2649	1280	444	6	2286
North Dakota Aug.	50	19	413	37	17	55	16	396	3	6	53	70	1	140	53	61	17	49	1,430
8 Mos.	629	181	3434	249	131	420	158	2964	41	76	422	844	7	1177	540	547	154	1	326
Ohio Aug.	888	448	6185	271	258	818	135	4992	57	107	943	1381	12	2154	1087	899	166	5	1407
8 Mos.	11354	4657	50179	2502	2433	6757	1638	41290	547	1136	6989	13384	126	17029	10178	5896	1511	100	8397
Oklahoma Aug.	206	111	1701	34	26	121	26	1170	10	19	147	323	2	400	239	166	35	1	231
8 Mos.	2269	917	12093	313	266	844	269	9729	61	192	1031	2711	16	2725	2063	1106	325	35	1728
Oregon Aug.	962	728	7102	411	364	900	148	4482	79	94	926	1369	15	2667	1097	985	225	1527	24,061
8 Mos.	11277	5695	55414	3648	3020	7177	1546	35572	702	1061	6589	13067	220	21325	9699	6631	1964	156	9628
Rhode Island Aug.	50	42	368	23	12	47	7	475	3	6	39	66	1	152	46	124	6	1	210
8 Mos.	603	457	2922	218	161	337	85	3503	66	101	253	6							

Famous Armstrong Tire "Fist" Pulls In Sales For You — As No Other Brand Can



Skid-stopping "Ounce of Prevention" Safety Discs give you an **EXCLUSIVE** sales feature that customers can see!



Why sell tires your customers can't tell from any other tires?
Why compete on a price basis that squeezes your profit?

Sell Armstrongs! Customers can *see* the exclusive Safety Discs in the tread. Any salesman can *demonstrate*, in 10 seconds, why Armstrongs stop skids as no other tires can. Once sold, Armstrong customers stay sold — come back for more.

For more sales, easier sales, bigger profit — get the Armstrong story!



ADVERTISING ADDS SELLING PUNCH!

In LIFE, POST . . . on TELEVISION . . . Armstrong advertising is big-time, frequent. Hits hard because it tells the same proved "fist" story over and over.

GUARANTEE CLINCHES SALES!

Unconditional road hazard Lifetime Guarantee is longest, strongest in the industry. **Get the story!**

THE ARMSTRONG RUBBER CO.

Home Office,
West Haven, Conn.

Like a weld in steel...



Wagner Lockheed *... the best known name in brake service*

LOCKHEED HYDRAULIC BRAKE PARTS, FLUID and BRAKE LINING • AIR HORNS • AIR BRAKES • TACHOGRAPHS

Wagner[®] Lockheed EXCHANGE BRAKE SHOES

are properly bonded to hold lining to shoe



You never need to feel afraid that the lining on Wagner Exchange Shoes is going to pull off. The Wagner method of applying lining to shoes makes sure that the two are *properly bonded*—holding the lining to the shoe as securely as the weld in fabricated steel.

YOU take full advantage of mass production facilities when you exchange shoes. The slow, tedious part of the relining job—delining and relining the shoes—is done for you. In not having to do this work in your shop, you save time on every job...speed turnover...and gain time for other profitable work.

Under the Wagner plan you use clean, inspected, completely reconditioned shoes equipped with the right

premium quality lining to insure customer satisfaction—and the price enables you to make a substantial profit.

WAGNER EXCHANGE BRAKE SHOE SETS have lining "bonded-on" or "riveted-on" according to highest factory standards. Sets are available for all passenger cars and some light trucks with both standard and over-size lining thicknesses.

COMPLETE WAGNER LINE includes Wagner Lockheed Brake Parts, Fluid and Lining to service all makes and models of vehicles. In exchange shoes, you have a choice of "WEB" COMAX BONDED SETS, "WB" SETS BONDED WITH "WP" LINING. Wagner Brake Lining is available in rolls, sets, blocks and slabs to provide complete coverage for all vehicles. For details, consult nearest supplier of Wagner Lockheed Products, or use coupon requesting FREE copy of Catalog BU-579.



ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

Wagner Electric Corporation

6498 PLYMOUTH AVENUE, ST. LOUIS 14, MO., U.S.A.
(Branches in principal cities in U.S. and in Canada)

Please mail me a free copy of Catalog BU-579 covering your complete line of bonded shoe sets.

NAME

FIRM NAME

ADDRESS

CITY & STATE



NEW ECONOMY IN RAMBLER SIX—Only Rambler dealers sell America's acknowledged economy leader, now thrifter than ever for '59, with new advanced carburetion. Rambler Cross Country Station Wagon illustrated above.

JOIN THE SUCCESS PARADE TO

SELL THE ONLY CARS WITH PERSONALIZED COMFORT



SECTIONAL SOFA FRONT SEATS glide forward or backward independently so driver and front seat passenger enjoy exactly the right leg-room. This means true **PERSONALIZED COMFORT!**



AMERICA'S TOP TRAVEL COMFORT—Airliner Reclining Seats! Now more comfortable than ever with **ADJUSTABLE HEADRESTS!** Seats recline to any of five comfortable positions.



SALES MAKER! EXCLUSIVE NAP COUCH is one of many adaptations of Reclining Seats. Wonderful for napping children on trips, rest couch for adults. Make up into twin beds, too!

NEW LUXURY IN 270 HP AMBASSADOR V-8—Only Rambler dealers sell America's new kind of luxury car. Top V-8 performance with superb handling and riding qualities. Distinguished 4-door Country Club Hardtop Sedan, below.





NEW RAMBLER REBEL—THE COMPACT V-8—Only Rambler dealers sell the car that's tops in V-8 economy with outstanding performance plus parking and handling ease. The Rebel offers velvety performance in every speed range.

RAMBLER...THE COMPACT CAR

The year 1958 was the greatest in Rambler history. Sales skyrocketed 81% through August. Rambler out-sold all but 6 other makes.

While other cars grow bigger, bulkier and more gas thirsty, Rambler retains its compact size. For 1959, Rambler presents new style and beauty, even greater economy and new exclusive Personalized Comfort features that mean more sales appeal.

In the Rambler line for Fifty-Nine, there's a car for every prospect: Economy Six, Rebel V-8, Ambassador V-8, Rambler American including the new 100-inch wheelbase Station Wagon ... here by popular demand.



BIGGER SALES POINT EVERY YEAR! SINGLE UNIT CONSTRUCTION! Only Rambler—of all low-priced American-built cars—has it! All-welded body-and-frame—more room, more safety, no body bolt squeaks or rattles. Exclusive Deep-Dip rustproofing.

Sell The Best of Both

- **BIG CAR ROOM**
- **SMALL CAR ECONOMY**

GO RAMBLER FOR '59

For full details on the Rambler Franchise—
Call or write in complete confidence:

Director of Dealer Development
AMERICAN MOTORS SALES CORP.
DETROIT 32, MICHIGAN

Here by Popular Demand — **RAMBLER AMERICAN 100-INCH WHEELBASE STATION WAGON**—Rambler dealers now sell a

small car with fully automatic, standard or overdrive transmissions. The American is also available in a 5-passenger sedan.



Fireball Roberts wins ...with Pedrick-



▲ Fireball Roberts stands beside the Pedrick-equipped 1957 Chevrolet which he drove to victory in the NASCAR Southern 500, before a record crowd of 80,000 stock car racing fans at Darlington, S. C., and again at Birmingham, Ala.

◀ Roberts driving No. 22. In the words of his chief mechanic, Paul McDuffie of Atlanta, Ga., "Engine performance was outstanding throughout the entire race . . . our oil consumption for the race was approximately 1½ quarts . . . the best record yet."

▶ (left to right) Frank Strickland, owner of No. 22, Roberts, Miss "Southern 500", and chief mechanic Paul McDuffie, winner of NASCAR's coveted "Mechanic-of-the-Year" Award for 1958.

1958 Southern 500 equipped Chevrolet!

Breaks record with 102.59 MPH average to win stock car classic by 5 laps; 3 of the 5 fastest qualifying cars also Pedrick-equipped

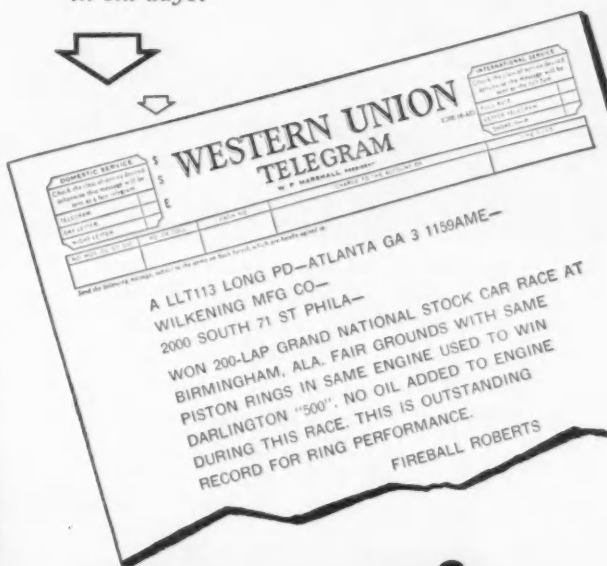
Glenn (Fireball) Roberts of Daytona Beach, Fla. led the field for the final two-hundred laps to score an impressive victory over stiff competition in the ninth annual Southern 500 stock car race at Darlington, S. C. Roberts' car was equipped with Pedrick FORMFLEX Chrome CS8 Oil Rings and Pedrick Chrome Compression Rings. The identical Pedrick FORMFLEX Chrome Piston Rings selected by NASCAR "Mechanic-of-the-Year" Paul McDuffie for the engine of Fireball Roberts' victory car, are available at your Pedrick jobber right now.

Same driver, same rings, same engine win NASCAR at Birmingham

Equipped with the same Pedrick rings he used in winning the Southern 500, Roberts won the 200-lap NASCAR Grand National Stock Car Race at Birmingham, Ala. the Sunday following the running of the Southern 500. *Not a drop of oil was added during the entire 100-mile race.*



1958 marks the first year that Pedrick-equipped vehicles have actually participated in national stock car racing events. The results speak for themselves. Pedrick rings outperformed all other makes used, providing mechanics and repair shops with convincing evidence of the superior performance, dependability and *all-purpose* application of Pedrick FORMFLEX CHROME Sets. The most conclusive statement on the outstanding qualities of Pedrick FORMFLEX Piston Rings comes from Fireball Roberts, himself. Read what he says in this telegram received after his *second NASCAR stock car race victory in six days*:



Pedrick

PISTON RINGS

WILKENING MANUFACTURING CO., Philadelphia 42, Pa. • IN CANADA: Wilkening Manufacturing Co. (Canada), Ltd., Toronto 2

Chilton's MOTOR AGE, NOVEMBER, 1958

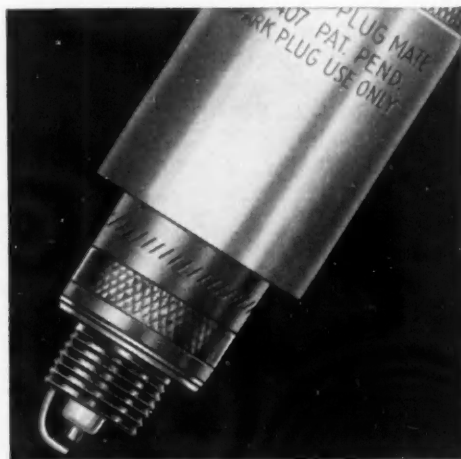
It's the new "Plug-Mate" for "Plug-Master"

Now — Champion introduces a with a firm, careful grip for faster,

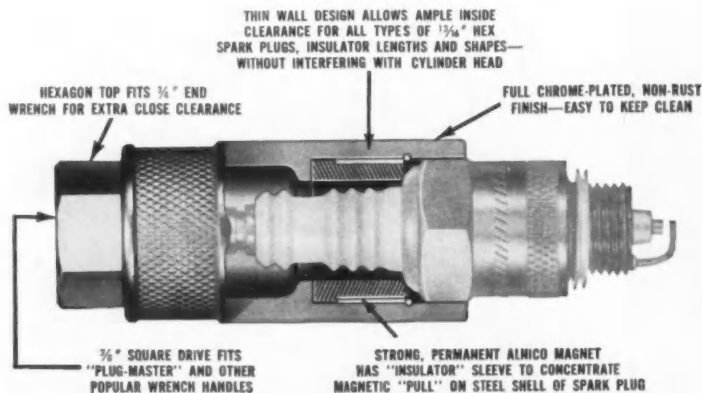
Magnetic plug-holding makes plug work quicker and easier—and you get it only from Champion! And Champion's new time-and-trouble saving "Plug-Mate" has a low introductory price of only \$1.49* with a special assortment of 30 fastest-moving Champion Spark Plugs!



Even if your hands are oily or greasy, you don't have any trouble handling the "Plug-Mate" socket. Your fingers always get a sure, no-slip grip on the band of diamond-pattern knurling that only Champion offers.



The "Plug-Mate" greatly reduces danger of breaking an insulator. Its deep $\frac{1}{16}$ " hexagon-fit fully covers hex of a spark plug shell, holds plug straight, without "cocking" that leads to insulator breakage.



Selling and servicing spark plugs has always been profitable. And now Champion makes it faster and easier than ever! Champion's "Plug-Master" wrench is already the best tool available for removing and installing plugs. Now Champion's new "Plug-Mate" magnetic socket, holding plugs in a firm careful grip, makes your plug jobs go still faster and easier. (And that means more profitably, too!) Order "Plug-Mate" magnetic sockets for all your plug wrenches. And if your wrenches aren't "Plug-Masters"—order those, too. Next time your Champion supplier calls!

CHAMPION SPARK

Chilton's MOTOR AGE, NOVEMBER, 1958

and other spark plug wrenches . . .

magnetic socket that holds plugs easier removal and installation !



Even when held like this the "Plug-Mate" doesn't let a plug fall out, thanks to its strong, permanent Alnico magnet. Magnetic grip makes plug removal and installation easier and faster, yet doesn't magnetize plug.

AVAILABLE WITH SPECIAL CHAMPION ASSORTMENT



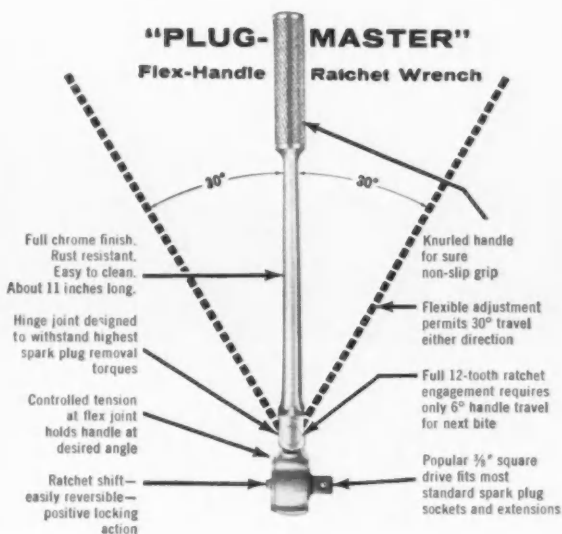
The "Plug-Mate" magnetic socket, packed in a 30-plug assortment of fastest-moving Champion types to save on separate handling and delivery costs, has a low introductory price of only \$1.49.* This assortment — DR5-30 — contains 10 F-14Y Champions, 10 J-12Y Champions and 10 J-18Y Champions.

*Suggested dealer price for socket only. Assortment of 30 Champion spark plugs at regular dealer price. (Minimum dealer price established by Fair Trade Agreements in Fair Trade States.)

PLUG COMPANY • TOLEDO 1, OHIO

Chilton's MOTOR AGE, NOVEMBER, 1958

The Plug-Master Story



Now acclaimed by mechanics everywhere as the outstanding wrench of its type, the "Plug-Master" is available from your wholesaler in your choice of four assortments of 50 fast-moving Champion plug types. (One for the over-all car market, others specifically selected for Ford Motor Company, General Motors, or Chrysler Corporation cars.) Packaging in these assortments enables you to obtain this new wrench at the low price of \$4.25.*

*Suggested dealer price for wrench only. Assortment of 50 Champion plugs at regular dealer price. (Minimum dealer price established by Fair Trade Agreements in Fair Trade States.)

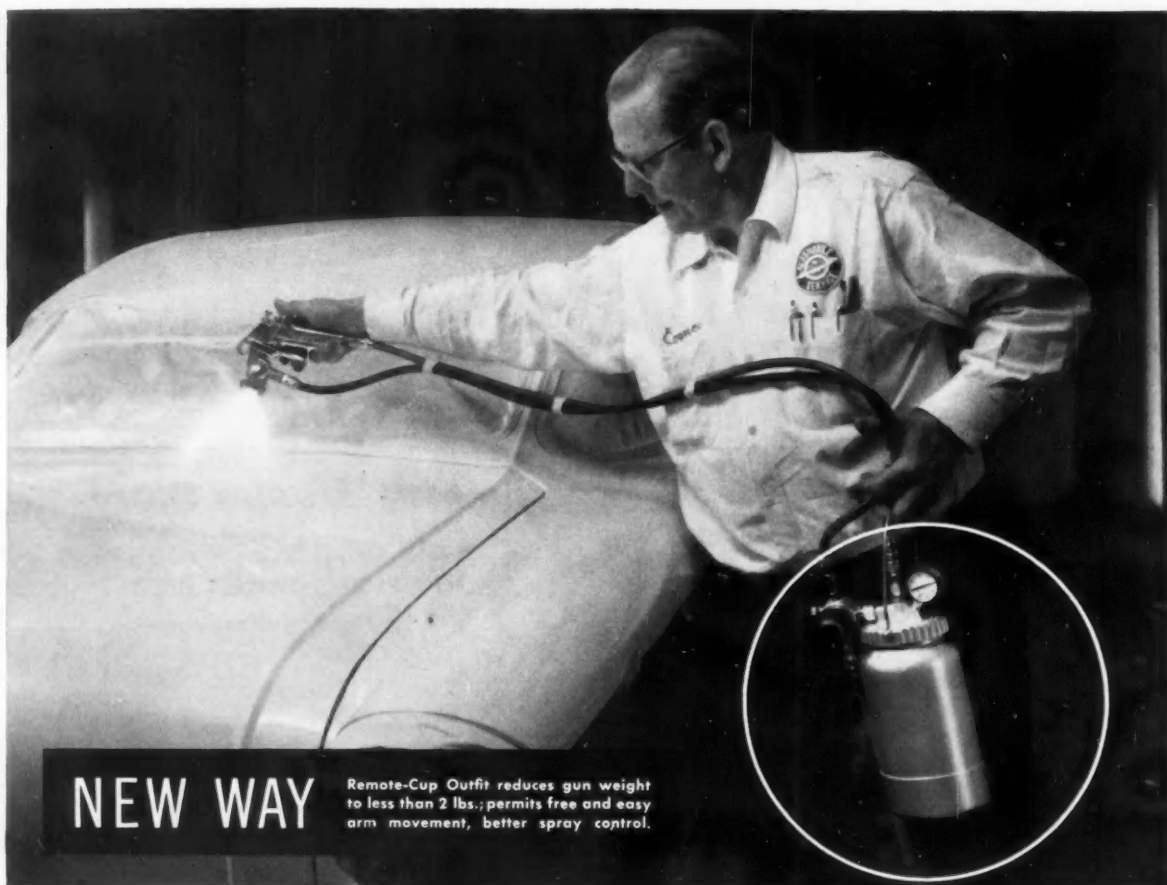


Dependable 5-rib

CHAMPION

SPARK PLUGS

Circle 369 On Inquiry Card, page 71



NEW WAY

Remote-Cup Outfit reduces gun weight to less than 2 lbs.; permits free and easy arm movement, better spray control.

DeVilbiss Remote-Cup Method brings new ease and perfection to paint jobs



Old way

Cup-Gun combination filled with paint puts over 5 lbs. of dead weight on the painter's outstretched arm, restricting movement and causing fatigue.

Here's the first major advance in car-painting equipment in over a decade—the DeVilbiss Remote-Cup Method!

New ease—the Remote Cup lets you maintain proper gun angles to spray horizontal surfaces, under rocker panels, or in cramped corners. Material supply in the idle hand reduces gun weight 60%. Greater capacity permits nonstop painting without laps from dry edges.

More beautiful finishes—Exclusive five-way control balances fluid- and air-flow for *all* materials—lacquers, enamels, acrylics, primers, surfacers—to prevent orange peel, dry spray, sandy finishes. Minimum overspray and elimination of rebound cut paint consumption.

Call your nearest distributor or jobber today for a demonstration—or write direct for complete details.

THE DEVILBISS COMPANY

Toledo 1, Ohio

Barrie, Ontario • London, England
Branch Offices in Principal Cities

FOR BETTER SERVICE, BUY

DEVILBISS





*Did Al star
in movies?*

*No...he stars with
customers by replacing
with Timken® bearings*

You, too, can be top man with your customers. When it comes to replacing tapered roller bearings, always install Timken® bearings . . . and tell 'em it's Timken. It's a name they know means quality—America's best-known name in bearings. It lets your customers know that you use the best in replacement parts. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".



TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.
TAPERED ROLLER BEARINGS

CUSTOMERS LOVE YOU WHEN YOU REPLACE WITH AMERICA'S BEST-KNOWN BEARING...JUST TELL 'EM IT'S...

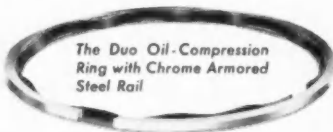
McQUAY-NORRIS makes the most *Power-Packed* rings in the world



The Famous "400" Oil Ring
with Chrome Armored Rails

...and the Famous
"400" Oil Ring
is in every set...

by actual comparison
the "400" Oil Ring
will outperform any other
oil ring made today.



The Duo Oil-Compression
Ring with Chrome Armored
Steel Rail



The Famous Torsion-Tight
Aviation Fire Ring

McQUAY-NORRIS
CHROME



LEAK-PROOF
PISTON RINGS

Distributed by the finest wholesalers in the industry
McQUAY-NORRIS MFG. CO., ST. LOUIS • TORONTO

Help your customers

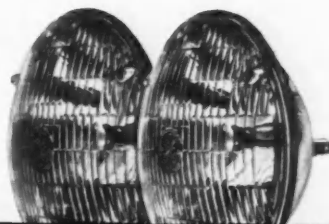
Now! See in spite of the other car's lights!



BRACE YOURSELF! Here comes another driver who hasn't dimmed his lights. He's 175 feet away. Your vision of your side of the road is "washed out" by his glare. Then after you pass, it takes precious seconds for your eyes to readjust to the reduced light, and you still can't see the road ahead clearly. It's like entering a dark theatre on a sunny day!

NOW YOU CAN SEE in spite of the other car's lights—better than ever before, because you have new G-E SUBURBAN headlamps. Their "built-in spotlight" effect in the low beam projects more light along the right shoulder, helps keep your eyes on your side of the road. Now you can spot that fallen box at the 200-foot mark—which you *couldn't* see with your old headlamps!

New G-E SUBURBAN Headlamps have a "built-in spotlight" ...in the low beam!



No other 2-headlamp system ever gave you as much light in the low beam as these new General Electric SUBURBAN Headlamps. And you need

"built-in spotlight" effect—puts more light where you need it to make passing easier and safer. Helps you recover your vision more quickly when the other car has passed.



Sell General Electric's new SUBURBAN Headlamps with the "built-in spotlight" in the low beam—NOW, while millions are seeing G-E ads in America's top magazines.

No present 2-headlamp system gives as much light in the low beam. Therefore, 9 out of 10 drivers are prospects for pairs of G-E SUBURBAN Headlamps. With SUBURBAN Headlamps, you see through the light from oncoming cars, even if the other driver fails to dim.

You can order SUBURBAN Headlamps in a new package ... four in a carton. Eye-catching 32" x 21" streamer comes in each carton of 6-volt lamps, includes all the information you need to sell pairs of lamps.

Order from your G-E wholesaler today. Let General Electric's "biggest ever" headlamp promotion pay off for you. General Electric Co., Miniature Lamp Dept., Nela Park, Cleveland 12, O.

GENERAL ELECTRIC

**DO TUBE / TUBELESS TIRE REPAIR JOBS BETTER
AND FASTER WITH SCHRADER**



Every tire on every car that comes in deserves **30-SECOND SCHRADER INSPECTION**

You couldn't spend two minutes of your time more profitably. Not only does "air" inspection service give your customer the greatest safety and tire performance—but it lets you discover important new tire business. Gauging and adjusting air pressure in seconds per tire is easy with Schrader Air Products. Ask your supplier about the gauges, chucks, airlines, and caps and cores that make this service possible . . . from Schrader.



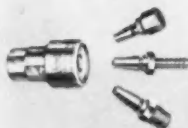
SCHRADER VALVE CORES outperform every other core on the market. All parts align perfectly, are interchangeable the world over.



SCHRADER VALVE CAPS provide maximum sealing force with minimum effort. Guaranteed airtight to 250 lbs. pressure. Doubly reinforced.



SCHRADER PENCIL-TYPE GAUGE is handy, dependable, and a genuine Schrader quality product. #7750T



SCHRADER AIRLINES AND FITTINGS are available in complete lines. Select components to fit your needs.

Schrader
a division of **SCOVILL**

A. SCHRADER'S SON • BROOKLYN 38, N. Y.
Division of Scovill Manufacturing Company, Incorporated

FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

SPORTS PAGE

A Story Went With It

Note: The following column is a reprint of Mr. Smith's column of Feb. 26, 1948. It is concerned with a fish story.

THE destination was Miami and Hialeah Park, but a career sucker can get touted of anything. Anyway, a story went with this tip, and it is well known that no sucker can resist a tip when a story goes with it. The story went like this:

"You should have been around the other day," the man said. "I know you claim to have seen some fish in your day, but I never saw anything like this before in my life and I never hope to again. Yes sir, you should have been around."

"I'll tell you how it was," the man said. "You know they had a couple of young hurricanes here last fall. The winds blew half the water out of Lake Okeechobee up into the swamps and canals of the Everglades, and the rains that came with the storm raised the level of the lake so high the water couldn't flow back. It just lay there in the back country all winter and millions of minnows hatched there."

"Well, this spring the water started to recede. It ran back into the canals and so on into the lake, and where it found its way into the canals it would cut a crevasse through the embankment. In these crevasses, the water rushing through to reach the canals was practically solid with minnows."

"Well, sir, the bass came up to these points to get the minnows. Black bass, thousands and thousands of 'em, and all elbowing and crowding and shoving and floundering after those minnows like women around a bargain counter."

"Bert and Charley and I drove down there in the station wagon with the boat and out-



VIEWS OF SPORT
By Red Smith

board. We took the boat maybe two, three miles up a canal from where we left the car and then we got out to fish from the embankments alongside these crevasses. We had fly-rods and bass bugs.

"Charley got rigged up first. I was just a few feet from him setting up my tackle and, before I could get the line through the guides, he caught six bass. In a few minutes we all were fishing."

"Listen, you didn't angle for those fish. You tossed the bug out into the current and gave it a flick to let the crowd know it was there, and a half-dozen bass raced for it. It was practically impossible to make a cast and retrieve it without getting at least one strike. Those fish did everything but stand up on their tails and wave and holler, 'Hey, bub, throw it over here.'"

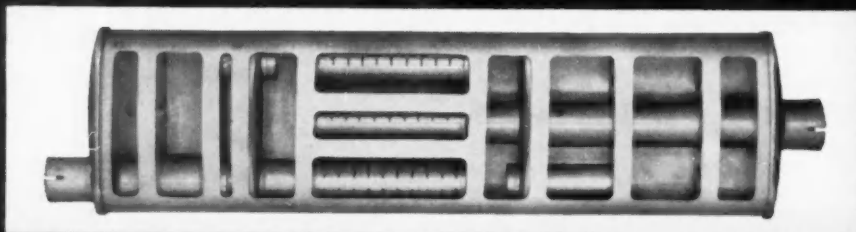
"They were all large-mouth and they were all sizes. The legal minimum down here is twelve inches—not ten inches like those bass you're so proud of up in Wisconsin—and we must have caught scores and scores of fish right around that size, which we returned. We kept only the lunkers."

"We killed twenty fish, all pretty good sized. We could have taken many times more, but that was more than we wanted and, any-

(Continued on page 80)

NEW

MoPAR PROFIT MAKER FOR YOU



New MoPAR Sono 4X muffler

The *all-new* MoPar Sono 4X muffler engineered by Chrysler Corporation is ready to bring you *more profitable* service business—now!

The new MoPar Sono 4X gives you:

- **Higher profit** because it's Chrysler Corporation-engineered to *fit* the Chrysler-built cars you service—reduces installation time, gives you more time for additional service business.
- **Reduced inventory** by standardization—fewer mufflers now service most Chrysler-built cars.
- **Guaranteed performance**—works in perfect balance with other related parts, because it's engineered *especially* for Chrysler Corporation cars' exhaust systems.
- **Immediate availability** from your local MoPar Wholesaler or Chrysler Motors Corporation dealer. You also can get MoPar's new merchandising aids to help increase your muffler sales.

The new MoPar Sono 4X gives your customers:

- Up to 100% longer muffler life because it's zinc-coated both *inside* and *outside*.
- A muffler designed to reduce the four major causes of muffler failure: internal corrosion, vibration, internal temperature variations, backfire.
- Measurably quieter operation with an important reduction in back pressure.
- A muffler engineered for Chrysler Corporation-built cars—to *keep* new car performance.

The MoPar Sono 4X muffler is another example of the complete "bumper to bumper" profit makers designed for Plymouth, Dodge, De Soto, Chrysler and Imperial cars—available only from MoPar.

Sell the line that keeps your customers sold on you—MoPar

MoPar Division
Chrysler Motors Corporation
Detroit 31, Michigan



PARTS AND ACCESSORIES

mister

jobber executive

MOTOR AGE: JOBBER EXECUTIVE EDITION

Retail Trade Increasing Steadily

EVER SINCE TROOPS WERE LANDED in Lebanon consumers have been on verge of a buying spree, says Paul Wooton (Washington, D. C., member of Chilton's Editorial Board). While retail trade has not reached the "spree" stage, it has increased steadily in volume and is near its all-time high....One half of increase in personal income traced to defense.

Surprising development is abrupt end in decline in plant and equipment purchases....Few months ago there was general agreement that decline would continue for two years....

Prospects for increased corporate profits brighter....Liquidation of inventory has ended....Exports are rising....Consumers, both individual and corporate, no longer waiting for prices to come down....Recession seems thing of past.

Upsurge In Steel Demand Underway

MOST STEEL MEN, ACCORDING TO IRON AGE look for upsurge in steel demand....Reason: Increasing optimism over outlook for automotive demand....There's growing conviction that automakers will sell more 1959 models than 1958's....Detroit is showing signs of rebuilding steel inventories after months of cutting back.

New AERA Directory Available

NEWLY REVISED MEMBERSHIP DIRECTORY of Automotive Engine Rebuilders Association just published....Copies have been mailed to all members.... One feature of AERA membership is the functioning of organization as an international clearing house for automotive jobber machine shop problems.

Oil Industry TBA Group Plans Meeting

THE ANNUAL MEETING of Oil Industry TBA Group will be held December 1st and 2nd at Chase Hotel, St. Louis, Missouri....Program has been planned to embrace all aspects of tire, battery and accessory merchandising....Marketing, sales promotion, dealer and customer relations, prospects and problems will be discussed.

Rem Line Tool Chest Division Purchased

ADVERTISING METAL DISPLAY COMPANY purchased Rem Line Tool Chest Division from Herring-Hall-Marvin Safe Company, Ohio....Gene McClenehan has been named sales manager for new division.

Improved Headlamp Announced

GUIDE LAMP DIVISION OF GM introduced an improved sealed beam headlamp for automobiles that do not have four-lamp headlighting system.... Seven-inch lamp provides more light and better illumination in lower beam for two-headlamp vehicles....The "Guide T-3 Powerbeam 50 Headlamp" will be available through marketing program of GM's AC Spark Plug Division.

OPERATION **JOBBER**

Direct mail can well perform solid merchandising chores for the Jobber executive aware of its requirements

MANY wholesalers use direct mail as one of their main advertising mediums. In the last ten years direct mail advertising has been refined considerably. It can be counted upon to achieve a long list of objectives. Here are some of the things it can do:

1. Supplement the work of your salesman. By securing leads for future follow-up.

2. Gets the story of key line products to all customers in your selling area.

3. It can supply frequent contacts. Especially where personal contacts are not feasible. Either through cost or distance or where potential is not great.

4. Direct mail pre-introduces new lines and services. Ahead of the visits of the sales staff.

5. When properly prepared, direct mail leads to high readership among your selected list of people or business concerns.

6. It can influence people to patronize a given store.

7. By careful name and list selection, direct mail pinpoints retail outlets known as best possible sales outlet in a territory.

If further proof is needed to prove the increasing use of direct mail advertising, authorities report its use has increased over 500 per cent during the last

twelve years. Stated in dollar volume, the amount of money spent in direct mail promotion is exceeded only by newspapers.

What are the Objectives

Before you start a direct mail campaign, determine the objectives of the program. Who is to receive the material? Is there some kind of a special offer? Make sure which classes of your customers should be contacted by mail. Many wholesalers are careful to separate their lists by dealers, service stations, independent garages, fleets, specialty shops, etc. They do this in order that specific products may be directed to specific mailing lists.

It is not advisable to use a self-mailer or a post card when your story warrants a type written letter. With a personal fill-in. Many products are made more important by the use of direct mail letters.

Continuous Effort

CONTINUITY is one of the keystones of successful mailing campaigns. The cumulative effect on your audience should not be under estimated. One or two "shot" efforts are hardly worth the time or money invested.

Repeated tests have proven

that it is not necessary to use First Class Mail, when the piece can be mailed by Third Class Mail. Hundreds of tests indicated that when speed of delivery is not essential returns from Third Class Mail are almost as good as from First Class. Savings in postage cost are obvious.

The direct mail experts also recommend the use of postage-saver envelopes. These can be sealed instead of tucked, giving the envelope a more personal appearance. When huge quantities of mail are sent out over a period of a year, a great deal of money can be saved. Either by automatic or by hand sealing devices.

Most manufacturers can be relied upon to furnish an impressive array of direct mail material. This is especially tailored for use by automotive wholesalers. They are interested in cooperating with you to the fullest extent. It is important to carefully select those key products to be promoted by direct mail letters, mailing cards, brochures, etc. You can not advertise every line. But time and money will permit a concentrated campaign on those time-tested products that account for seventy-five percent of your sales and profits.

*signs
of the
times . . .*



Over-flow crowds jammed the Allentown Fairgrounds (Pa.) recently for the one day and night parts and equipment show held by Allentown area NAPA jobbers in conjunction with Quaker City Motor Parts. Above, Howard Bradley, president of QCMP, and Robert Stacey (right), vice pres. and general manager of NAPA, pose with model Miss Joyce Trent.



The "big four" of Big Four Industries, Cincinnati, assume positions on a bulldozer to move some soil for excavation for their new half-million dollar plant at Maineville, Ohio. Shown, left to right, are: Arch F. Hildebrant, Sec'y. and General Manager; David W. Besuden, Sales Manager; Eric T. Rothley, Director of National Accounts; and Vernon H. Hildebrant, President.

Space Drawings Near for P. A. S.

This month will mark the Exhibit Space Drawings for the 1959 Pacific Automotive Show to be held in San Francisco. Drawings will take place on Friday, November 21, 1958 in San Francisco Civic Auditorium.

The First Drawing will be for Exhibitors who have displayed their products in five—or more—Pacific Automotive Shows. Drawing will start at 1:00 P.M. on that date. Exhibitors who have displayed in four, three, two, one Pacific Automotive Shows—or new Exhibitors—will make their space selections immediately thereafter from the remaining display space available.

The 1959 Pacific Automotive Show will be presented all under one roof and on one level, reports the Show Committee. It is expected to be the finest in P.A.S. history.

Hicks Speaks At AWDA Convention

Charles R. Hicks, Secretary of the Automotive Parts Rebuilders Association, was guest speaker at the Automotive Warehouse Distributors Association's annual convention. Event was held November 2-3, in Kansas City, Missouri.

Mr. Hicks, Secretary and General Manager of Accurate Parts, Inc., Kokomo, Indiana, chose a subject of great interest to automotive warehousemen, "How Rebuilt Exchange Parts May Be Profitably Handled Through Warehouse Distribution."

He is author of several technical articles on automotive parts and distribution.



Lt. Gov. Crawford Parker sets the Perfect Circle Speedostat for a test run on the Indianapolis Motor Speedway at a demonstration given for the Governor's Highway Traffic Safety Committee. Looking on, left to right, are: Al Huber, committee chairman; Col. Harold Zeis, superintendent of the Indiana State Police; William B. Prosser, Perfect Circle President, and Ralph R. Teetor, former Perfect Circle president and inventor of the Speedostat.

Brussels Delegate

William A. Ross, chief engineer of the Weaver Mfg. Co. was U.S. Delegate to the symposium on Motor Vehicle Safety Inspection held in September in conjunction with the Brussels

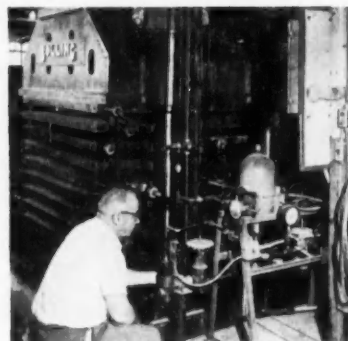
World Fair. While in Europe, Mr. Ross talked with representatives of Weaver. Also with the various European automotive safety engineers. During the symposium sessions he spoke on motor vehicle inspection in the United States.



Cleveland Ignition Co. was recently named as central warehouse distributor for automotive lines of Bendix Products Division. Above is pictured classroom session on Bendix products held jointly by Bendix executives and Cleveland Ignition personnel.



John Spring, star hurler for the Raybestos Cardinals, pitched his club to the 1958 Men's World Softball Championship at Minneapolis recently.



Robert Beidle, chief engineer for Anchor Industries, is shown setting electrical and pressure controls on new \$100,000 hydraulic press which will expand Anchor's production of replacement automotive floor mats.



Oil portrait above of Ben Asch was unveiled recently in New York at ceremonies honoring Mr. Asch as the founder and chairman of the board of Automotive Affiliated Representatives.

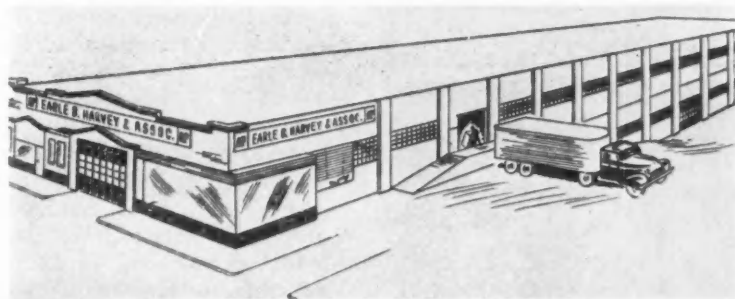
Unification O. K. Given by Boards

A. J. Thompson, president of Motor and Equipment Wholesalers Association and member of Motor and Equipment Wholesalers Association Reorganization Committee, and John Reynolds, president of National Standard Parts Association and member of National Standard Parts Association Unification Committee, have made the following joint announcement: At meetings of the Boards of Directors of Motor and Equipment Wholesalers Association, held in Washington on September 25, 1958, and of National Standard Parts Association, held in Chicago on October 10, 1958, the proposed by-laws of a new organization, to be known as The Automotive Service Industries Association, Inc., were presented and unanimously approved by both Boards of Directors.

The by-laws provide for the formation of a unified industry-wide association. It would have a board of twenty-seven directors. This consisting of eighteen wholesaler directors and nine manufacturer directors, and with separate wholesaler and manufacturer divisions.

They were developed by legal counsel in accordance with the understandings reached by appointed representatives of Motor and Equipment Wholesalers Association and National Standard Parts Association, in the spirit of the resolution adopted at a meeting held in Chicago on August 14, 1957, and many subsequent meetings.

Members of the Motor and Equipment Wholesalers Association Reorganization Committee (Jay T. Davis, A. S. Hatcher, John F. Creamer) and the Na-



Illustrated is the new sales and warehouse facility of Earle B. Harvey & Associates of Boston. Partners of the firm are Earl B. Harvey, past president and life member of Automotive Boosters Club (B-1) and Draper M. Sarvey (B-1) and immediate past executive director of the 19557 National Automotive Service Show.



In glamorous company during the exhibitor space drawing held at the Pick-Congress Hotel, Chicago, were these four representatives of the Joint Operating Committee for the 1959 I.A.S.I. to be held in February. Left to right: Charles W. Zimmerman, Zim Mfg. Co., Chicago; Don H. Teetor, Perfect Circle Corp., Hagerstown, Indiana; Miss Automotive, Eve Strausberg; Victor B. Day, Bear Mfg. Co., Rock Island, Illinois, Publicity Committee Chairman; and Wm. J. Menghini, Springfield Auto Supply Co., Springfield, Ill. Over 400 companies took part in the drawing of the number capsules.

tional Standard Parts Association Unification Committee (Edward Gammie, Don Teetor, Henry Trauscht) plan to meet in the very near future to effectuate the plan. It is hoped that the plan may be presented to the membership conventions of Motor and Equipment Wholesalers Association and National Standard Parts Association in February, 1959.

With the adoption of the plan, Motor and Equipment Wholesalers Association and National Standard Parts Association would then dissolve themselves. Every member in good standing of Motor and Equipment Wholesalers Association and National Standard Parts Association would automatically become a member of The Automotive Service Industries Association.

NECROLOGY



Herman O. Rosenstein (photo above), vice president and secretary of Standard Motor Products, Inc., died at his home in Brooklyn, N.Y., on September 23 after a long illness. He was 68. Mr. Rosenstein was affiliated with Standard Motor Products for some 35 years. Well-known in the automotive after-market industry, he was a charter member of the Automotive Advertisers Council.

Carl Stuhlreyer, comptroller and secretary of the Grote Manufacturing Co., died October 24. He was 54. Mr. Stuhlreyer was vice-president and president elect of the Motor and Equipment Manufacturers Association. He had been with Grote Manufacturing Co. for 22 years.

Louis J. Cresta, co-owner of Cresta Brothers Auto Parts, San Francisco, died September 17. Long prominent in the automotive industry, Mr. Cresta was a director of both of the Pacific Automotive Show and the Motor and Equipment Wholesalers Association. He was among the leaders in the move to devel-

op the California Automotive Wholesalers' Association. He served as its state president in 1957.

George A. Borchik, general manager of the Jordan Electric Products Division of the Electric Storage Battery Co., died recently at his home in Lakewood, Ohio. In 1926 Mr. Borchik joined the Willard Storage Battery Co. in Cleveland as a branch store salesman. He was named manager of replacement sales in 1946. In 1956, he was named general manager of the Jordan Electric Products Division.

Industry Meetings

Nov. 22-29 excluding Sunday, Nov. 23 The Automobile Show, Grand Exhibition Hall of the Trade and Convention Center at 34th Street and Convention Ave., Philadelphia, Pa.

Jan. 17-25—1959 Chicago Automobile Show, International Amphitheatre.

Feb. 2-4—Automotive Accessories Manufacturers of America exposition, New York Coliseum, New York City.

Feb. 15—Automotive Booster Clubs International executive counsel meeting, Conrad Hilton Hotel, Chicago.

Feb. 15-17—National Standard Parts Assn. National Convention, Conrad Hilton Hotel, Chicago.

Feb. 15-17—Motor and Equipment Wholesalers Assn. National Convention, Conrad Hilton Hotel, Chicago, Ill.

Feb. 16—Automotive Booster Clubs International board of governors meeting, Conrad Hilton Hotel, Chicago.

Feb. 17—Automotive Affiliated Representatives board of directors and membership meeting, Pick-Congress Hotel, Chicago.

Feb. 18—Automotive Booster Clubs International banquet, Conrad Hilton Hotel, Chicago.

Feb. 18-21—International Automotive Service Industries Show, Navy Pier, Chicago.

Feb. 26-27—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, Sheraton-Cadillac Hotel, Detroit.

Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach, Florida.

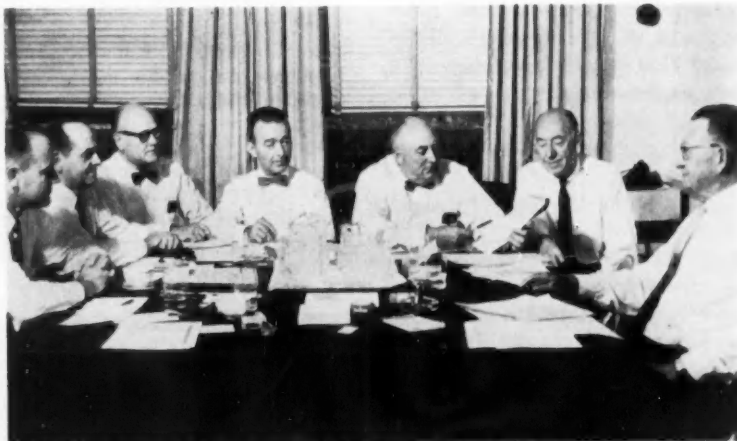
March 12-15—Pacific Automotive Show, San Francisco Civic Auditorium, San Francisco.

May 3-8—Top Management Institute, Motor and Equipment Wholesalers Assn. Allerton House, University of Illinois, Monticello, Ill.

May 4-6—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, San Marcos Hotel, Chandler, Ariz.

May 17-20—Automotive Engine Rebuilders Assn. convention, Royal York Hotel, Toronto, Ontario.

May 27-29—American Petroleum Institute, Div. of Marketing, midyear meeting, The Savery, Des Moines.



Automotive Parts Rebuilders Association Brake Bonding Institute Board of Governors meet to plan Feb. 13-14 clinic session. Seated left to right: Raymond Broach, Rayloc, Atlanta, Co-chairman; Harry Whitley, Micro Products, Inc., Dallas; Nathan Roberts, National Headquarters, Chicago; Paul Cottrill, Cottrill & Wideman, St. Louis; K. E. Goss, Clutch Exchange, Inc., Denver, Chairman; L. S. Sullivan, The Russell Mfg. Co., Middletown, Conn.; and S. Arthur Smith, Silver Line Brake Lining Corp., Los Angeles. Not shown—C. J. Cahill, Cahill Mfg. Co., Chicago.

Benoit Writes On 'Revolution'

Marketing practices of the automotive "aftermarket" are undergoing a revolution. So says C. A. Benoit, Jr., president of Permatex. Mr. Benoit sees the cause of the revolution in a new marketing technique. This technique he labels "redistribution."

Writing in a recent issue of "Sales Management," Mr. Benoit describes redistribution in this fashion. "... [It is] the utilization of large wholesalers to supply jobbers who in turn supply service stations, dealers, and independent repair shops."

Redistribution had its beginnings in the late 40's and early 50's reports Mr. Benoit. "When wholesale outlets (jobbers) increased from 8,000 to 12,000. Competition and economic conditions gave large and small jobbers one common problem—inventory."

25th Anniversary

Perfection Gear Co. of Harvey, Ill., last month observed its twenty-fifth year since relocating in that city. The company was founded in 1919. Harvey, Ill., is adjacent to Chicago.



Groundbreaking Ceremonies for the new, \$80,000 Micro-Lube Sales home office and factory in the Brook Hollow Industrial Development in Dallas were held recently. In the picture, on the ground, left to right, are Jim Moriarty, Micro-Lube general sales manager, and Ed Shipp, Shipp and Payne, Dallas. On the tractor is Jim Williams, president of the J. L. Williams Construction Co.

Automotive Wholesalers' Sales and Inventories

Data from Bureau of the Census, Department of Commerce

Region	Sales			Inventories	
	Per Cent Change				
	Aug. 1958 from Aug. 1957	Aug. 1958 from July 1958	8 Mos. 1958 from 8 Mos. 1957	Aug. 1958 from Aug. 1957	Aug. 1958 from July 1958
New England	-7	0	-2	+24	+1
Middle Atlantic	+7	-12	+4	...	-1
East North Central	...	+10	...	-8	+2
West North Central	-2	+7	+5	-1	-3
South Atlantic	0	-2	+1	+3	0
East South Central	0	+2	+2	+3	+2
West South Central	-11	-3	0	-2	-5
Mountain	+3	-5	+6	+18	+1
Pacific	-3	-1	+1	+2	0
United States	+1	-2	+6	+1	0

Indicators of Business Activity

These figures are based on latest thirty-day reports

	Latest Data	Month Before	Year Ago	Percentage Change from—	
				Month Ago	Year Ago
PRODUCTION					
Motor Vehicles (Units)	179,585	230,046	343,516	-21.9	-47.7
Industrial—F. R. B. 1947-'49=100 (Adj.)	137	134	145	+2.2	-5.5
SALES					
New Cars	370,000	375,350	495,217	-1.4	-25.3
Replacement Tires (Units)	6,678,519	7,442,064	6,488,365	-10.3	+2.9
Manufacturers (\$ Millions)					
Durable Goods	\$12,371	\$12,256	\$14,297	+0.9	-13.5
Non-durable Goods	\$14,023	\$14,028	\$14,341	None	-2.2
Department Stores, 1947-'49+100	148	140	144	+5.7	+2.8
GENERAL					
Consumers' Price Index, 1947-'49=100	123.7	123.9	121.0	-0.2	+2.2
Civilian Employment	64,629,000	65,367,000	65,674,000	-1.1	-1.6
Unemployment	4,111,000	4,699,000	2,552,000	-12.5	+61.1

Motor Age's Who's Who



Herchel M. Richey, photo, was elected vice president in charge of manufacturing, Roller Bearing and Rock Bit Divisions of The Timken Roller Bearing Co. He replaces **A. M. Donze**, who retired.

Hugo H. Traeger has been named assistant to the director of the Dole Valve Company's automotive jobber replacement division.

David E. Dion has been appointed sales manager of the West Coast Division of the Barrett Equipment Co.



Pat Leone has been made a director of The Gabriel Company, Cleveland, Ohio. He joined the company in 1955 as

vice president in charge of operations.

John Kozak has been appointed chief engineer of Hall-Toledo, Inc. He succeeds **George Aberl** who resigned.

Robert Guinn has been appointed district sales manager for the Maremont Muffler Division of MarPro, Inc., in the Seattle, Washington area.

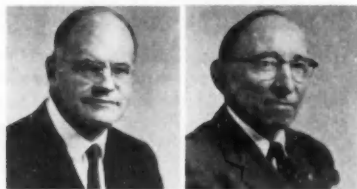


Gene P. Roberts has been appointed vice president of after-market sales for the Carter Carburetor division of

ACF Industries, Incorporated, effective November 1.

George M. Seib, formerly secretary of Oakite Products, Inc., has been appointed vice president of the company. **Erwin H. Steif**, who was Seib's assistant, has been promoted to the post of secretary.

C. R. Zink has been appointed to direct general sales of automotive original equipment for The Electric Auto-Lite Company's Electrical Products Group.



Garvin A. Drew, left, has been appointed general manager of the Schrader Division of Scovill Manufacturing Co., Inc. **Seldon T. Williams**, right, succeeds retiring **William M. Goss** as president and general manager of Scovill. **Russell C. Flood** has been appointed a vice president of Scovill.



Dr. Frederick J. Port, left, has been appointed general manager of the Automotive Division of The Electric Storage Battery Co. **Robert A. Risk** has been appointed sales manager of the Jordan Electric Products Division of the company.

Bingham A. McClellan has been promoted to sales engineer in charge of industrial original equipment accounts in the Cleveland area for Aeroquip Corporation.

Edward P. Riley, photo, vice president of Thompson Products, Inc. was named to supervise all of the company's automotive divisions.



Stanley C. Pace, vice president, succeeds Riley as manager of the Tapco Group of divisions. **James H. Coolidge**, vice president, is now chief fiscal officer of Thompson Ramo Wooldridge Inc. after Thompson Products' merger with The Ramo-Wooldridge Corp. on October 31.

Daniel O'Madigan, Jr. has been appointed general sales manager of Saco-Lowell Shops' new Automotive and Agricultural Parts Division.

Paul E. Nicholson, photo, has been appointed manager of the special accounts sales department of the Mo-



hawk Rubber Company. He was manager of Tread Rubber and Repair Material for the past five years. **J. L. Brunsted** has been appointed to succeed him.

A. W. Brunsell has been appointed manager—national accounts for the Gould-National Batteries, Inc.

George E. Ross has been appointed district representative in Seattle, Washington for Purolator Products Inc.

David E. McDowell has been named manager of the Tire Sales Division of the Gates Rubber Company. He joined the company in 1956 as manager of truck tire sales.



MOTOR AGE

newscoop

*Small Car Projects
New Lamp Development
Gas Turbine Engines
AMC Ups Sales Goal
S-P Introduces Lark
Inflation Barrier
More Money For Roads*

In the days ahead.... HERE'S WHAT TO LOOK FOR!!!

Small Car Projects Stepped Up

CHEVROLET LET ITS FIRST CONTRACTS for metal components for smaller-sized car.... November 1, 1959, set as production date for car.... Introduction to come in December 1959 or January 1960.

Chrysler has started letting contracts for small prototype car.... Hopes to have ready by next spring.... This does not, however, mean car will go into production.... It's being built strictly for engineering department on a standby basis.

Chrysler's small car will be a 106-inch wheelbase job.... It'll carry a front-mounted inclined six-cylinder powerplant with highly improved fuel economy.... It'll have a top speed of 100 mph.... Chrysler figures car would sell for under \$1800, including radio and heater.

Companies Tightening Up on Warranty Claims

WARRANTY CLAIMS ARE SOARING.... As a result, car companies taking a better look at way they're being handled.... Will shortly put into effect several new plans.... Estimated that car companies will pay a total of more than \$350 million in dealer claims this year.

One plan awaiting approval is a 12,000-mile-or-one-year written warranty.... Would provide more relief for certain owners.... Tighten up on other claimants. Up until now companies have been very liberal with claims.... In many cases extending relief beyond 12,000 miles on major breakdowns.... Under new program, no claims beyond 12,000 miles (or one year) will be considered, according to one service department official.

New Development in Automotive Lighting

LATEST DEVELOPMENT IN AUTOMOTIVE LIGHTING comes from Miniature Lamp Department of General Electric Co.... It's a lamp with "built-in spotlight" in lower beam.... Lamp projects more light down the right side of the road than seven-inch lamps used at present in the two headlamp system.

Designed for replacement market, lamp, called the Suburban, has been designed with reflector tilted downward and to right.... Lower beam filament is centered at focal point of parabolic reflector.... Instead of being off center as in current two-headlamp system.

Auto Industry Optimistic

ALL AUTO COMPANY CHIEFS are in general agreement that 1959 sales should increase about 20 per cent over what is expected this year.... Estimates for next year range from 5.5 million to 5.9 million units, including foreign cars.

Industry got off to a fast start toward achieving that goal, judging by public reception to the new cars and advance orders.... Many companies were turning in encouraging reports on initial orders.

However, unsettled labor situation at many plants continued to hamper production on 1959 models.... Result: Many dealers could not promise a definite delivery date.... In some cities, dealers were borrowing '59 models from one another for showroom purposes because they hadn't received a single car up to announcement date.

Gas Turbine Engines Coming

GAS TURBINE ENGINES may come sooner than expected.... That's latest word from Ford and Chrysler.... Both companies recently announced new developments in their turbine research projects.... Ford reports that two major obstacles——turbine wheel cost and heat exchanger performance——have been solved.

AMC Revises Goal Upward

AMERICAN MOTORS CONFIDENT small car boom will continue in '59.... Has revised its model year goal from an earlier 252,000 units to 300,000.

Company shooting for at least 6 per cent of domestic market next year.... Compares with 4 per cent during 1958 model year, which saw AMC climb to seventh place from 12th last year.... Company feels greater price advantage it will enjoy over competition on certain '59 models will help boost sales.

S-P Pins Hopes on Lark

STUDEBAKER-PACKARD SHOULD MAKE A STRONG COMEBACK during 1959.... Orders for S-P's new economy car, the Lark, topped 25,000 units.... Nearly as many cars as S-P sold during the first seven months of this year and approximately half of company's total 1958 production.

Critical newsmen previewing car had high praise for it.... The Lark has many styling refinements, including reclining seats, is a clean, simply styled car.... Despite a substantial reduction in overall length, without a reduction in height, car does not appear "boxy".... It has excellent handling characteristics and high fuel economy.... It is expected to sell for under \$2000.

Chevrolet's Surprise Announcement

CHEVROLET ANNOUNCED THAT it will make available a new four-speed transmission with the stick mounted back on the floor.... This was one of the best kept secrets in Detroit.... Even surprised many divisional people working closely on 1959 projects.... They say it was last-minute decision.

200 Million Population by 1967

SERVICE AND RETAIL FIRMS now can figure their customers, actual and potential, number more than 175 million.... That was the U. S. population as of Oct. 16.... And it's gaining by one every 11 seconds.

Less than two years ago population total was 170 million.... At this rate, there will be 200 million U. S. residents in 1967.

No Change in SBA Loan Policy

BUSINESSMEN IN THE AUTOMOTIVE TRADES need expect no change in Small Business Administration loan policy.... SBA will help with loans only when normal lenders deny credit.... And when borrower intends to build up business.

SBA may refuse a loan to a man who just wants to buy a service station, for example.... He must show he can manage and expand business.

Fight Higher Postal Rates

POST OFFICE DEPT. BID FOR HIGHER parcel post rates prompts businessmen to fight back.... Spokesmen in October planned to make their protests to postal officials and to Interstate Commerce Commission.... ICC must rule on parcel post charges.

New rates would average 17 per cent higher than present ones.... They would cost mail users more than \$88 million a year.

Too Many Unsafe Tires on Roads

TOO MANY MOTORISTS ARE DRIVING with unsafe tires.... That's what local tire dealers and the Inter-Industry Highway Safety Committee found in a Wichita, Kans., tire check.... Results may lead to checks in other cities to find if tires are neglected.

Teams in Wichita examined tires on 36,000 vehicles.... More than 40 per cent had at least one smooth or otherwise faulty tire.

Inflation Barrier

BARRIER AGAINST INFLATION is suggested by Sen. Bennett, R., Utah.... He would let government prohibit wage or price advances after any year when the consumer price index rises.

He doesn't want wage, price controls of wartime type, Sen. Bennett says.... But he sees growing inflation as harmful to business and consumers.... He thinks maybe government action is called for.

New Officers for Michigan Automobile Dealers Assn.

ROBERT G. COOPER, of Kalamazoo, is new president of the Michigan Automobile Dealers Assn.... Other officers elected at the association's annual meeting in Grand Rapids, Mich., recently are W. H. Kouts, first vice president; Paul Chapman, Group I vice president; Al Edwards, Group II vice president; Harold Rockwell, Group III vice president; Harold Labyak, Group IV vice president; Arnold Klett, Group V vice president. Gilbert L. Haley is executive vice president, and Howard Cook, treasurer.

New Chairman of Inter-Industry Highway Safety Com.

PAST PRESIDENT CHARLES C. FREED, of the NADA, is the new chairman of the Inter-Industry Highway Safety Committee.... He succeeds H. D. Tompkins, vice president of Firestone Tire and Rubber Co.

Chairman Freed names four fields for the Committee's special attention.... These are high school driver training, teen-age traffic safety, vehicle safety, and good highways.

Spending by Consumers Increases

SPENDING BY CONSUMERS IN WEEKS ahead may result in peak-level Christmas sales.... That's what government economists read from present signs.... Recession fears have been quieted.... There's more installment buying, after a six-month slack season.

Consumer installment debt was up by \$30 million in August, to a \$33.2 billion total.... All consumer debt came to \$43.2 billion.

Rules Against Phony Pricing

FEDERAL TRADE COMMISSION orders strict enforcement of its nine new rules against phony pricing.... Some of the doubtful practices barred are: Savings claims, when the price of an article is not reduced.... Markdowns from artificial markups.... Two-for-one sales, unless sale price is the usual price for one.... Pre-ticketing goods at prices higher than the usual selling price.

More Money for Roads

NEXT YEAR, CONGRESS MUST ARRANGE to steer more money into the interstate road fund.... Unless this is done, there may be no money for the interstate program in the year starting July 1, 1960, the AAA warns.

On paper, \$2.5 billion is earmarked for the program from the fund that year.... But if real money isn't raised, federal government can't pay its share of building costs.

Penalty Charge on Mail Delayed

ANOTHER DELAY IN THE PENALTY CHARGE on mail with postage due is ordered by the Post Office Dept.... Effective date of the 5¢ penalty now is Feb. 1, 1959.

In an earlier switch, the date selected was Oct. 31 this year (Motor Age, September, page 40).... It is changed this time because of possible confusion about correct postage at the Christmas mailing season.

How to Remove Auto Excise Tax

NADA CONSIDERS HOW BEST to get auto excise tax removed next year.... Likely move is opening of a broad-front campaign this fall.... With members asked to urge their congressmen to take off tax.

Plans for NADA and auto manufacturers' Open House program for 1959 are moving ahead.... Proposed kit on program is to be shown to the NADA board in December.

*Friendliness and good service
on a 24-hour basis made
this volume shop a success story*



CAMPBELL'S Garage . . . VOLUME Service 'round the clock

"**T**HE Campbells Are Coming" may be a melody not heard much in these days of 'Rock-n-Roll'. Yet nearly everybody in Denver is familiar with this slogan of Campbell's red-brick garage.

"In fact, we used to have horns on our service cars that played that tune," comments Ray Campbell. Ray with his brother, Jack, has been operating the 19-year-old garage in the same Denver location. Since starting their business career shortly after leaving

high school. Then the Campbell's took over this neighborhood garage, which was used solely as storage facilities. After one year's operation, they could see that there was no money in storage. With one mechanic, they went into the auto repair business.

Within a short time, they branched into body and front-end work. As Campbell's reputation mounted, additional men were added to the payroll. In time, the Campbell's liter-

(Continued on next page)

Two large entrances lead into the 16,500 sq. ft. garage.





Volume Service . . .

Continued from preceding page



Jack Campbell, shop superintendent, is shown making out repair form on a typical body rebuilding job.



Owners' Ray, left, and Jack, going over reports in their well-equipped office.

Highlights of Campbell's Garage Volume Operation:

1. By staggering the work shifts, the garage is able to offer complete service at any hour. As a general rule, however, major repair jobs are scheduled for handling during the day shift.
2. Ray and Jack Campbell are brothers and own and operate the repair shop. Ray is active in the Independent Garage Owners of America. Currently he is this organization's national president.
3. To prevent traffic jams when incoming customer cars arrive, Campbell's Garage has set aside a certain area of the shop's floor space as a "hold" or storage area. Here customer cars are placed until a mechanic is free to begin the necessary service work.

ally "threw away the key and put the garage on a 24-hour service basis".

Today their payroll includes 4 mechanics, 3 bodymen, 1 front-end man, 1 painter, 1 grease man and 6 tow-truck drivers. Besides three persons in the office force. By staggering shifts, they are able to render complete service at any hour. However, all major repairs are scheduled for the day shift.

Campbell's uses all but one-fourth of the 16,500 square-foot garage for repairing everything but frame work. (The one-quarter area is used for storage.)

"So that we can accept cars, at all times, we have set aside this limited area to temporarily store cars until a mechanic can get to it," added Ray. "The customers appreciate



Above: Upon entering the Campbell Garage, a customer comes directly in contact with the mechanic repair shop.



Left: The large well-equipped body shop section occupies the center of the garage. Jack is shown going over a body repair job with customer.

Below: The wheel alignment area is equipped with the latest alignment equipment. It is capably handled by an expert wheel alignment man.

this service."

Mechanics too are grateful for the large work areas. Plenty of elbow room is on hand. Overhead a 30-foot high roof arches over the area adding to the pleasant working conditions. All mechanic work is on a percentage basis and jobs are flat-rated.

Ray Campbell is current president of the Independent Garage Owners of America. Prior to this, Ray was 1st vice president and had served on the board of directors for 3 years. At the time of being elected president, Ray was currently head of the Colorado association of IGO.

At the Campbell brothers garage, friendliness and service is instilled in the custom-

(Continued on page 84)





Mechanical Story of the Month

INSTRUMENTS DON'T GUESS

Part One of a two-part series of articles dealing with a round-up of various types of test equipment

COMPRESSION GAGE



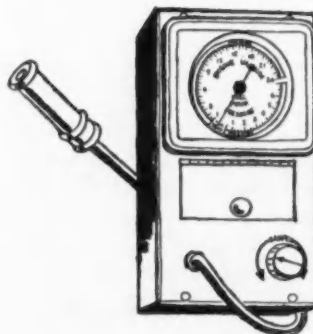
The compression test is usually the first and basic approach to diagnosing engine problems. Accurate compression readings will help locate internal engine problems. It is one sure way to pin point burned valves, a blown gasket, stuck or broken rings, by showing the mechanic which cylinder or cylinders are below standard in compression.

From a practical standpoint, total cylinder pressure is not nearly as important as uniformity in cylinder readings. Should one cylinder show 25 to 40 lb below another cylinder, the engine will not perform satisfactorily.

Some mechanics have discontinued constant use of compression gages, simply because the gage they have will not adapt to the late model engines, particularly the V-8's. Most compression gage manufacturers now

offer several types of adapters to reach these difficult cylinders.

VACUUM GAGE

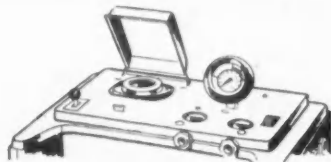


The vacuum gage is another worth-while unit in the hands of a skilled mechanic. Its use is tricky since many mechanical conditions produce the same effect. The vacuum gage is used chiefly as an aid in setting carburetor idle mixture and is most helpful in—locating manifold conditions—such as burned out heat riser or intake manifold leaks.

It has also been helpful in diagnosing cam

shaft problems, such as worn cam lobes. In the past it used to be found that in certain areas the vacuum gage was not as widely known and appreciated as it should be.

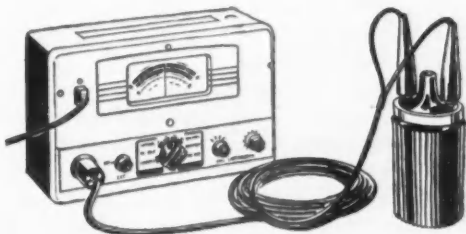
SPARK PLUG TESTER



You can find out a good bit about what is going on inside the combustion chamber by looking at the old plugs. The color check will indicate whether the plug is too hot or too cold. Are there cracks, chips, blow-by marks indicating leakage at gasket? And there may be signs of oxidation and erosion of the electrodes. But a visual check won't tell when the plug is misfiring inside, or if a spark is jumping across the outside porcelain. That's where the pressure-type spark plug tester comes in.

The most widely used unit combines a tester and a cleaner. It compares the "spark-ing efficiency" of the used plug against that of a new plug of the same type and gap setting. This procedure eliminates such variables as voltage output of the tester or of the power source. For maximum accuracy, the used plug should be cleaned, sparking surface filed and gap reset.

COIL TESTER

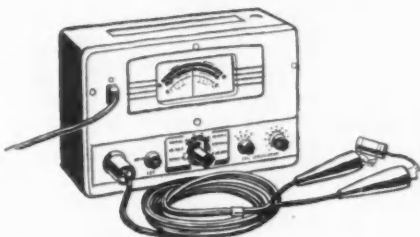


Some mechanics in diagnosing ignition troubles, use the swap system. When a unit is in doubt, they swap it for another on a trial basis. This is particularly true when it comes to the coil. Comparison tests have been used successfully with two coils hooked-up

together to compare the spark jump (air gap). This procedure is not always successful. The ability of the coil to throw a spark does not mean that the coil will function properly under all conditions.

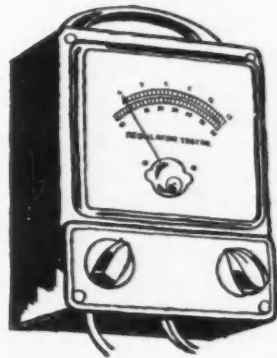
The sensible approach is to use a coil tester in relation to the other components with which it operates. Preferably it should measure both the electrical input and the output of the coil.

CONDENSER TESTER



Although it is general practice to install a new condenser when new points are installed, it is not always necessary. This is where the condenser tester fits in. It should be capable of making the following tests—capacity, series resistance, leakage and direct short.

REGULATOR TESTER



The regulator tester is a must for every shop, often is the most used. It combines the voltmeter and ammeter with a resistor needed for checking charging circuits. Some shop personnel prefer the fixed resistor type
(Continued on next page)

Instruments Don't Guess

Continued from previous page

that produces the same electrical condition as a fully charged battery. Others prefer the variable resistor type unit which compensates for battery deficiency.

CAM ANGLE METER



The portable cam angle meter checks cam angle while the engine is running. It is especially helpful with the new type distributor that has a window in the side for making adjustments. By attaching the cam angle meter leads to the side of the distributor, the mechanic can set to factory specifications while the engine is running. Also he can check the effect of breaker plate or vacuum control movement on cam angle.

Caution: When attempting to change the point settings, it is just possible to get the Allen wrench against the primary lead (condenser wire) and receive a shock through the wrench. You can also ground out the engine by touching the wrench against the body of the distributor and the primary lead at the same time.

With this instrument the mechanic can

determine two things—(1) total cam angle, and (2) the effect rpm has on cam angle. It has been found that one could set up a distributor as prescribed by the factory, but as the unit increased in rpm the cam angle changed considerably. This was due to a worn breaker plate bearing or worn distributor shaft bushings.



DISTRIBUTOR TESTER

The use of the distributor tester is the only way the mechanic can fully observe all functions of a distributor assembly. With the aid of this tester, it is possible to set cam angle, check or correct centrifugal advance, test the vacuum control unit. In fact, the mechanic can observe every function of the distributor in action and compare it with service data.

One of the most important functions of a distributor tester is to show the mechanic what effect the centrifugal advance has on cam angle at various speeds, and how much the cam angle changes when the vacuum control is activated.

Basically the distributor has to function from idle speed, up to 12,000 sparks per minute to maintain turnpike speed. It not only has to supply spark to the plugs but has to allow enough coil saturation to build up ample current to the plugs at all speeds. Due to the sensitivity of today's engines, the mechanic should no longer depend entirely on feeler gage and visual inspection to service distributors.

Inaccessibility of V-8 distributors is another reason why every service man should be sure that the distributor is functioning

perfectly before it is installed on the engine. The only way to be sure of all the functions of the distributor, is to test the unit off the vehicle on an accurate distributor tester.

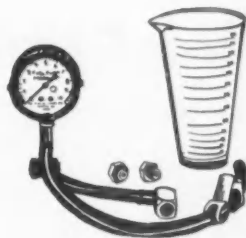
POWER TIMING LIGHT



The timing light is an essential instrument for setting the ignition timing to the proper mark with the engine running. Proper use of timing light will eliminate guesswork, aid the mechanic to restore the engine to factory-recommended settings.

On older engines the "ping setting" worked out reasonably well. The mechanic could advance the timing until the engine "pinged," then back it off until the ping disappeared. On modern engines it is possible to over advance the initial timing 10 to 15 deg with no audible detonation or knock. That is why it is advisable to use a timing light rather than gamble on timing settings.

FUEL PUMP TESTER

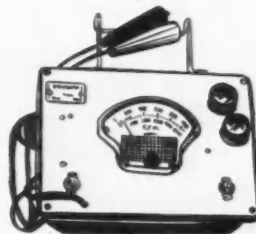


Our experience shows that most mechanics when testing a fuel pump remove the fuel line at the carburetor, turn the engine over with the starter, and observe the fuel flow. This is not only dangerous, but it does not give a true picture of how the pump is functioning.

The fuel pump gage is the only accurate

way to check the true condition of the fuel pump. Worn linkage, weak diaphragm spring, or leaky intake valve will show up in the inability of the pump to hold pressure.

TACHOMETER



The tachometer is becoming more and more essential due to high idle speeds, particularly in engines with overlapping cams. Furthermore, the speed at which automatic transmissions shift, generators cut in, automatic timing advances or engine governors cut in can all be determined with a tachometer.

Should an engine appear to have carburetor trouble at certain speed, the engine can be brought up to that speed. Then as adjustments are made, any increase or decrease in speed shows up accordingly on the tachometer.

EXHAUST GAS ANALYZER



Exhaust gas analyzers (sometimes called fuel or combustion analyzers) measure the actual condition of the exhaust gases as they leave the vehicle. When using this instrument, the engine should be warmed up to normal running temperature. Then always allow enough time for the instrument to accurately record mixture changes.

(Continued on page 83)



Merchandising Story of the Month



Customer is being shown shiny spot on his spring. Worn-out shock absorber is generally the cause.

Brady (left) and customer talk over shock absorbers and compare standard with heavy-duty.



Sell Riding Comfort

Wheel alignment shop owner will not guarantee any work unless car's shock absorbers are seen to be satisfactory

BRADY'S Wheel Alignment & Brake Service is located way out in the Airport Shopping Center area, off the Highway, in El Paso, Texas.

In this location, Brady sells and installs an average of 80 sets of shocks per month.

"If we do our job right," said owner Andrew Brady, "we seldom see our customers oftener than once a year. Besides, no one drives in to order up a set of shocks, unless it's one of our regular customers who drives in with his new car to have a set of heavy duty shocks put on."

Need to be Sold

Shocks, then, have to be sold.

"Few customers realize they need new shocks," Brady explained. "The old shocks have worn out so gradual the car owner isn't aware of what happened."

Eventually, it becomes apparent to the car owner that his car doesn't behave on the road as it should. The car nose drives at high speeds, or it sways dangerously around bends in the road. The conclusion is that the front end is in need of alignment.

"First thing we do after listening to the owner's complaint is to inspect the springs. If they are worn shining we know new shocks are needed."

Quite regularly Brady gets a customer who complains that he has recently had an alignment, and he has been back for an adjustment. Still the car doesn't perform as it should.

"Upon checking the castor, camber, and checking the tires for correct air pressure, we find no fault with the alignment job. One thing was wrong. Whoever undertook the alignment job overlooked the sale of shocks."

Brady used to get his share of these comebacks, until he learned to sell a set of shocks when they were needed, or refuse to guarantee his alignment job.

Just as often a motorist comes in to complain that though he recently had his car aligned his tires are wearing off fast on both the inside and outside. Going over bumps, the wheels flex in and out because the worn out shocks fail to keep the wheels rigid enough to track as they should.

Brady, long in this business, and a specialist, will not attempt to sell a customer shocks until the customer has stated his problem and wants to know what it will take to correct it.

"No motorist can be sold shocks, as such," Brady stated. "They must be sold as a means
(Continued on page 105)

to Up Shock Absorber Volume

Exterior view of Brady's Wheel Alignment and Brake Service shop in El Paso.





Management Story of the Month

Know the law

Compiled by H. N. Morse, Counsellor at Law

LIABILITY for damage to automobiles left at filling stations for service is our topic this month. Let us examine our first case:

In the case of Nadel vs. Alexander—decided by the Court of Civil Appeals of Texas—Louis Nadel sued M. D. Alexander and Sol West, Jr. Nadel sought damages sustained by him when his automobile fell from a greasing rack on which it had been elevated. Nadel drove his car into the filling station operated by Alexander and West and purchased some gasoline.

Nadel got out of his car. Told Hartman, a station attendant, that he had had the car greased at this station a day or two before. But that there still remained a squeak in the rear spring. Hartman said that he would take care of the matter. Hartman got in the car and drove the car over the elevating rack. Hartman remained in the car. Another station attendant turned the lever which caused the car to be elevated. The car fell from the rack and was damaged. The Court of Civil Appeals of Texas rendered judgment for Nadel.

In the case of Herbert vs. Langhoff (decided by the Supreme Court of Louisiana) Mrs. Catherine Ann Herbert drove her automobile to the filling station of William A. Langhoff for the purpose of purchasing gasoline. The only person she found there was one Andrew Simmons, who sold her seven

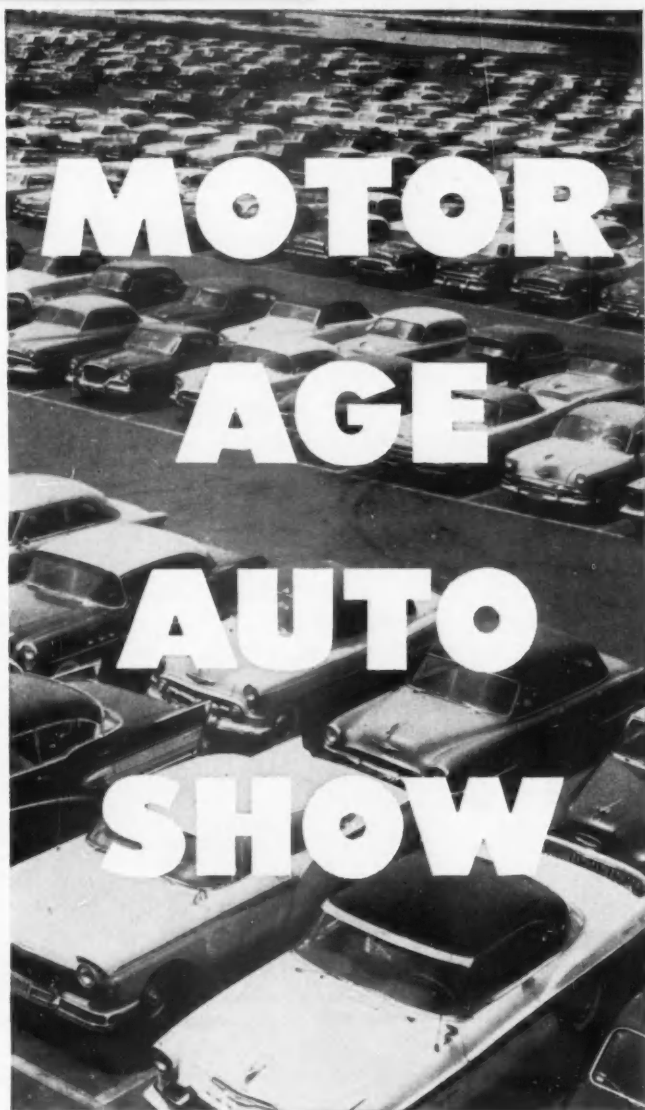
gallons of gasoline. After the purchase, Mrs. Herbert asked Simmons if he washed cars. He told her that he did. She told Simmons that he might wash the car. But that it would be necessary for him to carry her to her home in the car and bring it back to be washed. That after it was washed he would have to deliver it back to her at her residence.

SIMMONS agreed to do this; carried Mrs. Herbert to her home in the car; drove it back to the station, and there washed it. He then started back to Mrs. Herbert's home in the car. While on the way, the car collided with one owned and operated by a Miss White and was badly damaged.

Mrs. Herbert brought suit against both Miss White and Langhoff, alleging that the collision was due to the joint negligence of Miss White and Simmons. The theory on which Langhoff was sought to be held liable was that Simmons was his employee and agent; that while driving her car he was acting within the scope of his employment. Miss White denied that she was negligent, and defended on that ground. Langhoff's defense was that Simmons was not his employee, and for that reason he was not liable for any damage caused by his negligence.

The Civil District Court for the Parish of Orleans, Louisiana, dismissed the suit against Miss White on the ground that the collision was due solely to the fault and negligence of Simmons. The Court rejected Mrs. Herbert's demands against Langhoff on the ground that Simmons was not his employee and agent. Mrs. Herbert carried her case to the

(Continued on page 82)



THE trumpets sound . . . The curtain swings wide again this month for the November Section of the Motor Age Auto Show. These cars and the cars shown in the September and October issues represent the newest and finest products the automobile industry has yet developed—the 1959 models. (The November section carries the latest information on all the new cars that were released between October 16 and November 15).

Familiarize yourself with these descriptions. Many of your customers will be asking you about them. And in the days and months to come, yours will be the task of maintaining and servicing them!

SHOWS AND DATES

NOVEMBER

- Nov. 14-23—Los Angeles Auto Show, Pan Pacific Auditorium, Los Angeles.
Nov. 21-30—St. Louis Auto Show, St. Louis.
Nov. 22-29—Philadelphia Auto Show, Philadelphia.
Nov. 22-30—Detroit Auto Show, Artillery Armory, Detroit.
Nov. 29-Dec. 7—Houston Auto Show, Houston.

JANUARY

- Jan. 9-18—Midwest Auto Show, Municipal Auditorium, Minneapolis.
Jan. 10-17—Pittsburgh Auto Show, Hunt National Guard Armory, Pittsburgh.
Jan. 17-25—Chicago Auto Show, International Amphitheatre, Chicago.
Jan. 22-27—Tampa Auto Show, Fort Hesterly Armory, Tampa.
Jan. 25-Feb. 1—International Foreign and Sports Car Show, Dinner Key Auditorium, Miami.

FEBRUARY

- Feb. 19-23—Albuquerque Auto Show, State Fair Coliseum Bldg., Albuquerque.
Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach.

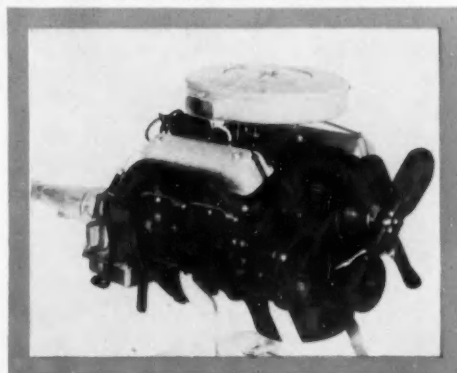
APRIL

- Apr. 6-11—Denver Auto Show, Denver Auditorium, Denver.



Park Lane four-door hardtop has 128 in. wheelbase.

Roof lines go lower on new **MERCURY**



Four-barrel carburetors appear on both the 430 cu. in. engine and on the 383.

*Engine moved more towards
front; drive line lowered*

MERCURY for 1959 offers a distinctive line tailored for the medium-priced field. Mercury now boasts new bodies and chassis designed exclusively for its cars. Completely new sheet metal has enabled Mercury stylists to create a fresh appearance.

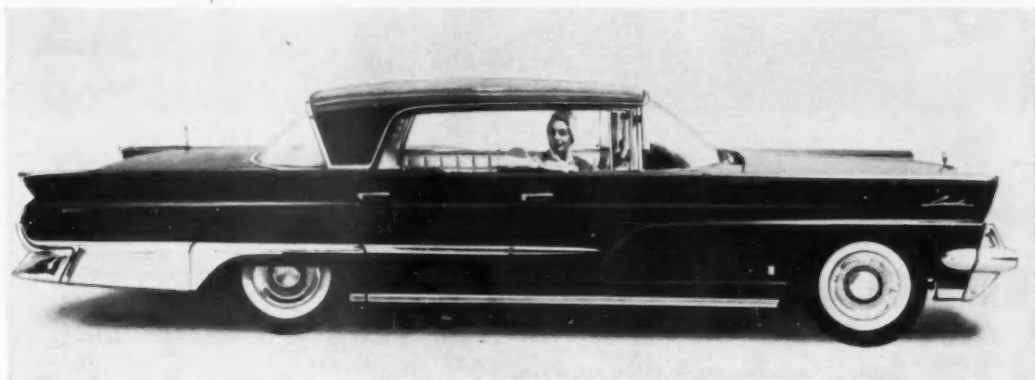
This year pushbutton controls for automatic transmission operation have been eliminated. Controls now are the usual steering column-mounted lever.

The cars are lower. And when the roof lines come lower usually there is increased difficulty of entry and exit. Also "bigger tunnels". Mercury has solved this problem by extending the wheelbase. This moves the engine farther forward. Thus drive line is lowered and its angularity reduced.

Speaking of the wheelbase, it is 128 inches for the Park Lane. For Monterey, Montclair, and station wagons, wheelbase amounts to 126 inches.

Tread has been widened both front and rear. This provides additional room under the hood; also accommodates a much wider frame. Tread, front and rear, is 60 inches on all models. Exception is Park Lane. It has 62 inch tread.

(Continued on page 78)



Four-door hardtop in the Lincoln series.

LINCOLN offers 3 luxury series

*Continental, Lincoln Premier
join Lincoln for fine car trio*

LINCOLN and Mark IV Continental cars for 1959 have been treated to considerable change both in front and rear appearance. Three series are offered for this new model year. First, the Lincoln; then the Lincoln Premier; and the Continental Mark IV.

Each of the series includes two and four-door hardtops. Also four-door sedans. Convertible model is available only in the Continental. In addition, the Continental offers a Formal Sedan and an Executive Limousine. The latter model has a center partition of a

curved glass partition window. It is operated from either the front or the rear compartment.

For Lincoln, the special rust-proofing dip process adapted last year has been continued. The entire body up to the belt line is immersed in the rust-proofing solution during assembly.

Engine for the Lincoln and Continental is the 430 cu. in. overhead-valve V-8. Compression ratio stands at 10 to 1. Smoothness of operation is aided by new engine mounts, a re-designed camshaft, a new carburetor and air cleaner.

Horsepower of this powerplant is rated at 350 at 4400 rpm. Torque at 2800 rpm is rated at 490 ft lbs.

The Twin-Range Turbo Drive transmission
(Continued on page 84)



EDSEL mounts on 120 in. wheelbase

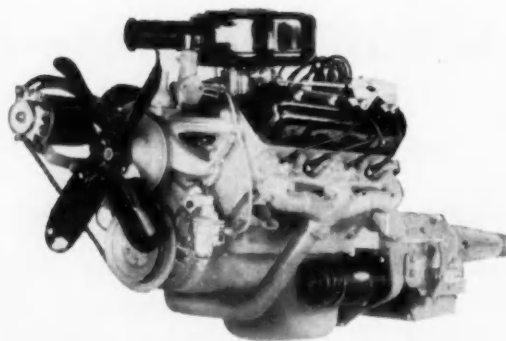
*Overhead valve six-cylinder
engine offered as option
features fuel economy*

EDSEL features two series and a station wagon this year. Sheet metal is freshly tailored. Gives a new look to the unique front-end treatment that characterized the line in the 1958 model year.

Edsels now are mounted on a wheelbase of 120 in. Push-button transmission has given way to the usual steering column lever. For fuel economy minded customers, Edsel introduces an overhead valve six cylinder engine option.

A new automatic transmission is offered as an option also. Two-speed unit has been called "Mile-O-Matic. It is lighter than the regular automatic transmission and has fewer parts.

Getting back to engines we might note that the six cylinder powerplant has a horsepower rating of 145. Then Edsel offers three V-8's. The 292 cu. in. engine is standard on the Ranger series. It has a horsepower rating of 200. For the Corsair series, the 332 cu. in. engine is standard. Horsepower here is 225. As an option, the 361 cu in. engine



Shown at top of page is four-door hard-top model; engine directly above is V-8.

is available on all Edsels. Horsepower of this powerplant is 303.

The station wagon models—known as the Villager—are mounted on 118 in. wheelbase. What about the engines? The engines of
(Continued on page 98)

LARK by Studebaker went on display recently in Studebaker dealer showrooms around the country. A new series of smaller cars, the Larks are newly designed from tires to roof-top say S-P engineers.

The wheelbase of sedan and hardtop models is 108½ in. Over-all length is only 175 in. This is shorter than previous models by more than two feet. The new station wagons measure 113 in. in wheelbase. Over-all length here is 184½ in.

Also offered for 1959 are Studebaker's



STUDEBAKER Lark makes bow

popular Hawk Six and V-8 five-passenger coupes. The new Hawk retains its sleek, classic styling with minor modifications. Among these are new combination parking-directional lights. Also new rear fender styling.

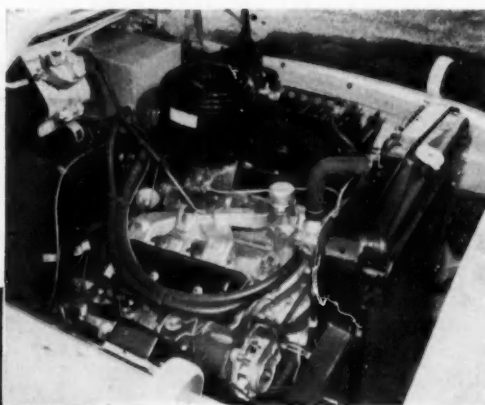
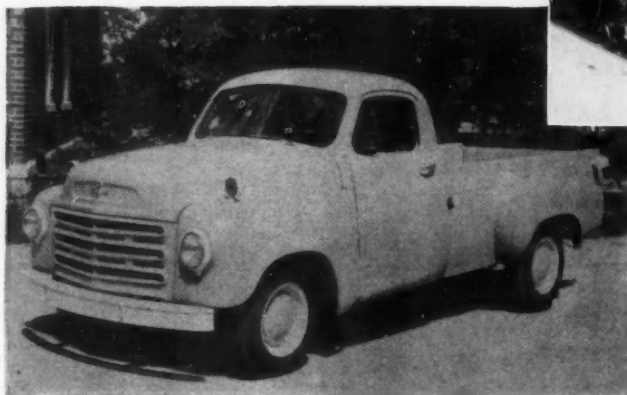
The dominant design theme of the car
(Continued on page 105)

*Wheelbase of Lark sedan and
hardtop is 108½ in. Over-
all length is 175 inches*

Studebaker's new 1959 Lark hardtop comes with a six or a V-8 engine.



Wide range of engines and models are shown in line of Transtar and Scotsman trucks



Above: V-8 engine mounted in Scotsman pickup truck for '59. At left: View of Scotsman pickup which is available with 112-inch or 122-inch wheelbase.

STUDEBAKER introduces two truck series

STUDEBAKER-Packard Corporation is introducing its 1959 line of Studebaker trucks. Included are the Scotsman six and V-8 half-ton trucks and the Transtar series ranging from a half-ton through two-ton vehicles.

A wide range of engines, power, models and gross vehicle weights are embodied in the 1959 Transtar line. At the light end of the line is the new six-cylinder engine. At the heavy end is the heavy-duty Torque Star 289 V-8. Gross vehicle weights climb from 5,000 pounds to 19,000.

The Scotsman pickup is powered either with the Studebaker 170-cubic-inch, six-cylinder engine, or the new 259-cubic-inch

V-8 that develops 180 horsepower at 4,500 rpm.

Hardware and trim are functional. In the 112-inch wheelbase models, the pickup body is 6½ feet long. The 122-inch wheelbase model offers either an eight-foot pickup or stake body.

No wheel wells break up the loading area. The floor bed is lower for back-saving ease of loading. Nine solid colors are offered.

A heavy-duty, three-speed transmission is standard with both the new Six and the V-8. A four-speed synchromesh transmission and overdrive are optional with both engines. Automatic transmissions are optional with

(Continued on page 96)

223 cu. in. Ford six-cylinder engine is standard. 292 or 352 cu. in. V8 is optional



Below: Ford's F-600 dump truck with a GVW of 17,000 lbs.



Four-wheel drive available on FORD trucks

FOR 1959 the Ford truck line offers numerous new features for light, medium, and heavy duty models. They include four-wheel drive models in the F-100 and F-250 Series. Also offered are a group of new tilt cab tandems; a special tractor package; and a new four-speed auxiliary transmission.

Leaders in the line are the Custom Ranchero and Courier. They are both mounted on 118-in. wheelbase. The increased wheelbase provides a total load space of 33.4 cu. ft. for the Ranchero. In the Courier sedan delivery it provides a loading length of almost 84 in. Both vehicles have been treated to some interesting mechanical features. Link-type

stabilizers have been added to the ball-joint front suspension in the interest of safety, better handling, and freedom from sway. Variable rate, six leaf rear springs have been provided with tip inserts for smoother operation and longer spring life. The 223-cu. in. Ford Six-cylinder engine is standard. Either the 292- or 352-cu. in. V-8 is available as optional equipment. There is a choice of four transmissions: three-speed, overdrive, two-speed Ford-O-Matic, Cruise-O-Matic.

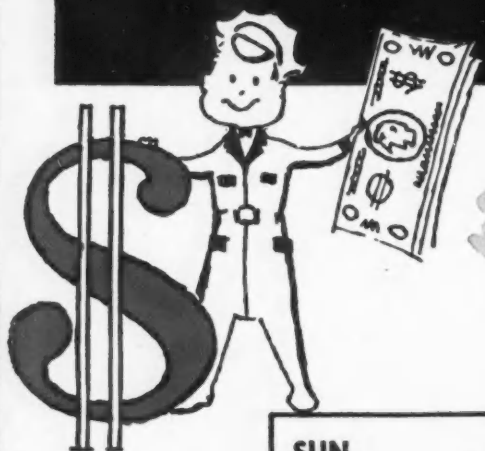
(Continued on page 81)





December 1958

MOTOR AGE
ASL

MOTOR AGE'S

QUICK CHECKS FOR QUICK PROFITS



SUN.	MON.	TUES.	WED.
	1 CAR SAFETY WEEK	2 "GIVE YOUR CAR A SAFETY CHECK"	3
7 	8 ELECTRICAL TUNE-UP WEEK	9 "DON'T CHANCE COSTLY DELAYS CHECK ELECTRICAL SYSTEM TODAY"	10
14 	15 POWER STEERING WEEK	16 "INCREASE PROFITS WITH POWER STEERING CHECKS"	17
21 	22 PREVENTIVE MAINTENANCE WEEK	23 "PREVENTIVE MAINTENANCE NOW WILL SAVE COSTLY REPAIRS LATER"	24
28	29	30	31

Let Motor Age's
MERCHANDISING CALENDAR WORK FOR YOU

MERCHANDISING CALENDAR

NAMES OF EMPLOYEES							
\$ales							Week's Sales
\$ervice							
\$core							
\$heet							
First Week							
Second Week							
Third Week							
Fourth Week							
Total Monthly Sales							

THURS.	FRI.	SAT.
4	5	6
<ul style="list-style-type: none"> ✓ Check steering & alignment. ✓ Check brakes & brake hoses. ✓ Check exhaust system for leaks. ✓ Check snow tires & chains. ✓ Check windshield wiper action & blades. 		
11	12	13
<ul style="list-style-type: none"> ✓ Check generator armature & brushes. ✓ Check voltage regulator settings. ✓ Check starter motor current draw & coil output. ✓ Check primary & secondary circuits. ✓ Check battery & cables. 		
18	19	20
<ul style="list-style-type: none"> ✓ Check power steering fluid level. ✓ Check for leaks in power steering hose connections. ✓ Check for binding in steering linkage. ✓ Check & adjust power steering drive belt. ✓ Check & adjust power steering unit. 		
25	26	27
<ul style="list-style-type: none"> ✓ Check clutch adjustment. ✓ Check automatic transmission fluid. ✓ Check automatic transmission bands. ✓ Check universal joints. ✓ Check motor mounts. 		

CALENDAR REPRINTS NOW AVAILABLE

Motor Age's Merchandising Calendar is available in reprint form as long as the supply lasts at no cost to you. This offer is limited to thirty days after publication.

Send for your free Merchandising Calendar NOW!!

Write to the Editor of Motor Age, Chestnut and 56th Sts., Phila. 39, Pa.

HOW TO USE MERCHANDISING CALENDAR

When you receive your Calendar reprint, hang it in a prominent spot in your shop or service station. Place your employees' names in the Score Sheet. Then hold an informal sales and service contest. See who gets the highest sales score at the end of the month, by promoting sales and services mentioned in the check lists. As an incentive, offer a prize to the winner.



SAFER LIGHTING for Later Cars

Based on an interview with V. J. Roper, Manager—Product Planning Miniature Lamp Dept.—General Electric Co. Mr. Roper was interviewed by M. K. Simkins, Motor Age's Detroit News Bureau

THERE is a lucrative market developing for the service station, the independent garage, and the service department of car dealers. It is a market that can bring in high revenues as well as save thousands of lives of motorists each year. The field? Vehicle lighting and its related services.

Surveys of passenger cars on the road today have indicated that at least 60 per cent of the cars on the road are not using the improved sealed beam lamps. And even a higher percentage of these cars (including new ones) are operating with mis-aimed headlights.

Service-minded managements can take advantage of this market in two ways. By selling new lamp units and in selling their aiming services. Actually headlights should be aimed every six months. This assures the driver that vehicle is safe for night driving.

(Continued on page 102)



MERRY OLDS for '59 boasts a 4-horsepower air-cooled engine.

The "Backward Look" for '59

MERRY OLDS offers fun and economical transportation

ONE of the most intriguing new cars to crop up among the new '59 cars is the MERRY OLDS. Boasting the label "the Backward Look," this car is made by American Air Products Corp. The MERRY OLDS is built along the lines of the 1901 car manufactured over a half century ago by the R. E. Olds Company.

American Air Products refers to the MERRY OLDS as the only 4 horsepower air-cooled motor car available today. The MERRY

OLDS claims performance fuel-wise of over 60 miles to the gallon.

The car is hand made of wood with a sturdy metal undercarriage. It weighs 460 lbs.; wheel length is 93 inches, hub width is 63 inches. Overall height from the ground to the top of the back seat is 53 inches.

There are two models, a wagon and a roadster.

Without altering its appearance, certain features have been incorporated for safety and ease of operation. These include sealed beam brass headlamps and a tail lamp, internal expanding brakes, automatic mechanical clutch, two speeds forward and reverse, and an electric starter.

(Continued on page 95)



Body Shop Story of the Month

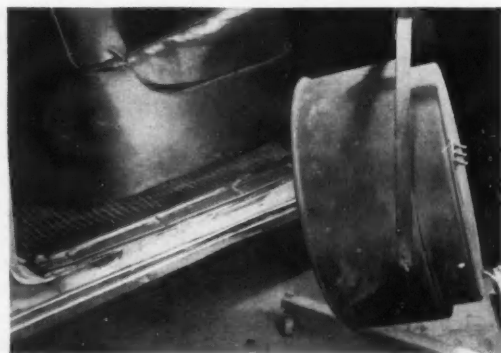


1. Sanding disk is used by bodyman to remove rust and paint from the rotted rocker panel.

2. Holes in rotted rocker panel are filled with steel wool. Epoxy paste is then applied.



3. Heat lamp cures plastic in three to ten min. Two to four hours are needed at 75 deg. F.



Here are two examples of how Epoxy Plastics can save you time and material and labor

By William M. Montgomery, Associate Editor

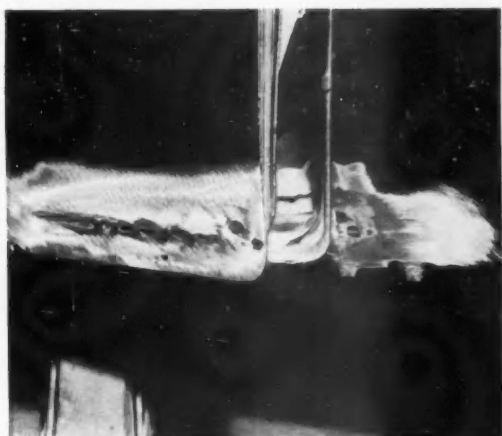
Epoxy Plastics

BODY shops are constantly on the look out for ways to speed up minor body repair jobs. These minor body repairs can be done quickly and efficiently by using epoxy plastic material which hardens very rapidly. Use of plastics is becoming more and more popular in the modern body shop.

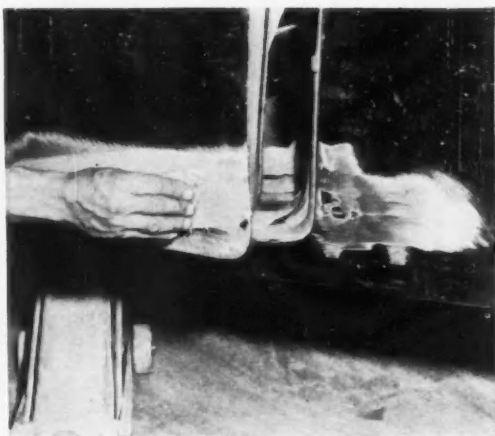
The first step in repairing a car with epoxy

4. Rocker panel looks as good as new. Cured epoxy was sanded and filed to desired shape.





1. Remove paint & rust with belt or disk sanding. Use No. 16 or 24-grit open coat abrasive paper.



2. With a squeegee, spread epoxy paste into repair, removing air bubbles. Smooth and feather.

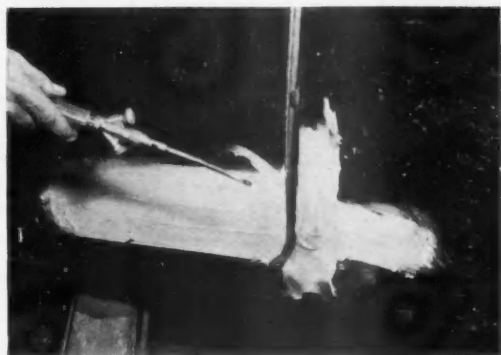
make repair jobs easy

plastic paste, is to clean grease and dirt from area to be repaired. Paint and rust must be removed by belt or disk sanding. The repair area must be indented below the original surface contour to permit proper filling. If possible, hold dolly block about an inch away from the back side of the panel being struck with the ball hammer.

To obtain backing for applying epoxy paste over large holes, spot weld $\frac{1}{8}$ inch hardware cloth or light gage sheet metal within opening. Steel wool can be used to fill smaller holes in confined areas.

Wipe prepared surface with clean dry cloth to remove dust. Mix epoxy paste according to instructions. (Continued on page 86)

3. Curing the repair takes one minute, using torch. A heat lamp will take up to ten minutes to cure.



4. Below is shown the finish sanding with a belt sander after the epoxy paste has cured.



BODY SHOP TIPS

WELDING CAUTION!!!

DO NOT USE OXYGEN to blow out small fires that start in the body deadener and under seal in inaccessible places during welding. The September Body Shop Tip that suggested that these fires can be blown out by turning off the acetylene and opening the oxygen was incorrect.

Several readers pointed this out before we caught it ourselves. The reason for not taking a chance by blowing out the small fire is ably described from this section of a letter received from R. B. Swope of Washington, D. C. Mr. Swope is president of the Southern Oxygen Co.

He writes: "It is possible that in a number of cases where a small fire was started that a blast of high pressure oxygen from your torch may pick up sufficient air before it strikes the flame. Then the cooling effect might extinguish the fire. It is more likely, however, that any smoldering inflammable material would burst into flame. In the presence of the oxygen it would result in a very much more serious fire."

Similar cautions were received from J. R. Tallmadge of California; Pennington's Garage, Nebraska; and John Gaydics of Ohio.

Preventing Lead From Falling Thru Holes

When filling in holes with lead a common problem that is present is the fact that in time the lead filling usually falls through because of road vibrations, etc. This problem can be solved easily by first counter-sinking the holes before filling them in. This will prevent the filling from falling through and will make a better job. *Clyde Haupt, 15 Division St., Lancaster, N.Y.*

Time-Saver In Repair Of Truck Bed Damage

If body damage occurs on the rolled outer ledge of the bed on 1/2 ton trucks, the following may save time in repairing. Remove the damaged rolled section and straighten or replace flat top section of the bed. Then secure a section of a straight tail pipe; weld to the top flat section. This will give you a perfect roll on the outer bed section. *Jennings H. Smith, Minton Chevrolet Company, Inc., Logan, W. Va.*

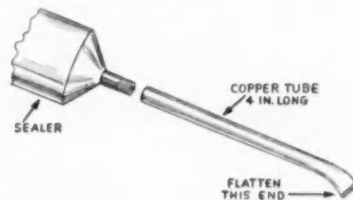
Straightening Door Without Striping Inside

If the door of a car is dished in, you can straighten it without striping inside of door. Clean small place in center of door with a buffer. Then sweat a stick of solder on the cleaned off spot. You then wait until it cools.

After it has cooled, bend the stick of lead in a hook. Most of these will pull out. If they don't come up far enough, take a hammer and hit in the arch of the bent stick. After all metal is up, take spoon, and lightly spoon the high places. This can be done perfectly and very quickly. *Harry Staat, 810 East Second St., Chillicothe, Ohio.*

Reworked Tubing Seals Leaks In Windshields

I have made a handy tube for sealing windshields that leak. Tap threads in the end of a copper tube, using 15/16 inch tap.



Flatten the other end of the copper tube. Screw end of tubing onto tube of sealer. Insert flat end between window and rubber moulding. It really does a fine sealing job. *Hank Briggs, Coppins Service, 16521 East Nine Mile Road, East Detroit, Mich.*

BODY SHOP TIPS

are worth

\$7.50

If you've developed an idea that has helped you to do body and fender work or painting better or faster, it may be worth money. Jot down the idea and, if necessary, make a rough sketch. Sometimes a snapshot will help. Just make the description of your BODY SHOP TIP clear, and if it is used, you'll receive a check for \$7.50.



Above is shown an employee inspecting and packaging the resin-weld element. At the right, girl works on assembly operation involving application of resin to components.



New RESIN-WELDING Process

A report on a special method of welding that bonds all filter components, holding them in grip stronger than rivets

A NEW method of welding was demonstrated recently by the Lee Filter Corporation of North Arlington, N. J.

A group of automotive engineers watched filters moving through conveyORIZED thermopresses at the rate of 132,000 per day. The machinery and the process embody new high speed techniques designed and built by Lee engineers.

The resin welding method bonds all the filter components and holds them in an irreversible thermo-setting grip, stronger than

rivets or other metal fastening devices. The treated and cured paper filtering element is bonded or welded in the process, which gives the unit its unified construction.

The company states that all possibilities of filter failure have been eliminated by the new construction. Chief among these are bypass, collapse and channeling of the contaminant. It also insures maximum service life for the filter.

The aircraft industry has been using resin
(Continued on page 98)



This damsel in distress stays safely in her car while she waits for help to arrive. The flag is readable from great distances in daytime and on the darkest night. It is issued by the Motorists' Good Samaritan League.

HUMAN EVENTS

Modern Tom Sawyers are shown cruising down the Connecticut River on their "water bus" raft. It consists of 32 oil drums made into a raft with a bus body mounted on top. It is powered with an 8-cyl. auto engine, drive shaft and propeller.



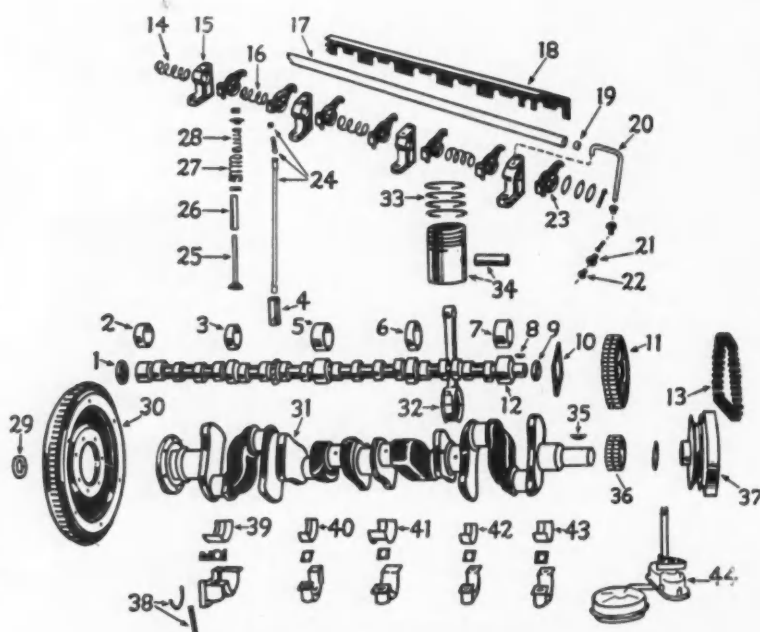
Lady Luck was with the driver of this demolished small car. He was able to walk away from the wreckage after car skidded on its side about two hundred yards.





It's hard to believe that the aluminum case on the car below could possibly hold the complete camping outfit seen at bottom of page. Five minutes is needed to convert case into a camper's tent. It contains table, chairs, cots, stove with bottled gas—even a kitchen sink with running water! Outfit made by Sky Camp, Inc., South Gate, Calif.





Exploded View of Buick Engine

1948 Buick Burning Oil

I have a 1948 Buick "50" series that I need help with. It is a road hog. I completely overhauled it and put on a new fuel pump and valve guides. After all this, it still uses about a quart of oil every 250 miles. Could you advise me on what I should do next?

Charles C. Hill
Hill's Garage
Cantril, Iowa

IF YOU are sure the oil is not leaking from a faulty gasket, then it must be that the oil is reaching the combustion chamber from some other source. The breather system should be clean and in good working order. A clogged breather will cause pressure build up in the crankcase. This could cause a leak at the rear main bearing or the timing case cover. By road testing the car and noting the color of the exhaust you can usually pin

point the trouble. Since the fuel and vacuum pump has been replaced, I would suggest disconnecting the oil supply to the valve rocker arms and running the car for a few miles. If blue-gray smoke appears from the exhaust then the trouble can be narrowed down to the piston assemblies due to too much oil being thrown up to the cylinder walls caused by loose bearings. Remove the oil pan. Running a bearing oil test will determine whether the rod bearings or main bearings are at fault. If they show excessive oil leakage a complete bearing job with the correct undersize bearing should be installed. Even though new valve guides were installed, a deflector should be used to shield the valve springs from the oil. This engine was equipped with a shield for this purpose. I would also recommend using a good non-detergent oil for a 500 mile test.

Starting Problem With '55 Dodge And '57 Plymouth

I have a problem with a 1955 Dodge and a 1957 Plymouth. Both of these cars will start cold or when hot, but run them 10 or 20 minutes and they will not start. However when you leave them stand for an hour or more they will start without any trou-

for troubleshooting



ble. I have checked everything and can't find a solution to this problem.

S. McGath
M & M Auto Parts
Dalten, Ga.

THE difficulty you are having could be caused by a leaky needle valve or a high float level. I would suggest having the float level reset and the needle valve and seat checked. Also check the fuel pump pressure as it may be excessive.

1951 Dodge Has Transmission Trouble

I have a customer who has a 1951 Dodge with the fluid drive transmission. When he starts the car in gear the motor will miss. I've checked the timing and compression and put in new spark plugs. I checked the distributor. I also checked the wires for the automatic transmission all the way through. I put a new switch on the carburetor. After all this it still misses. Would there be something wrong with the transmission?

William R. Staesser, Jr.
Long Eddy, N.Y.

FROM the description of the condition you are experiencing I would say the trouble is in the transmission. What usually happens, the free wheeling gear

slips, causing a terrific chatter and vibration when starting out. Sometimes changing the transmission oil will take care of it. Other times it is necessary to install a new cluster gear assembly. As you know, the free wheel gear is part of the cluster.

1955 Cadillac Hard To Start At Times

We have been servicing a 1955 Cadillac for one of our customers. The car runs fine but is hard to start at times. We tuned the engine carefully and adjusted everything to specifications. I noticed that a lot depends on how you turn the key. Sometimes it kicks right off other times it acts like it has no spark to the coil.

Modern Motors,
Philadelphia, Pennsylvania

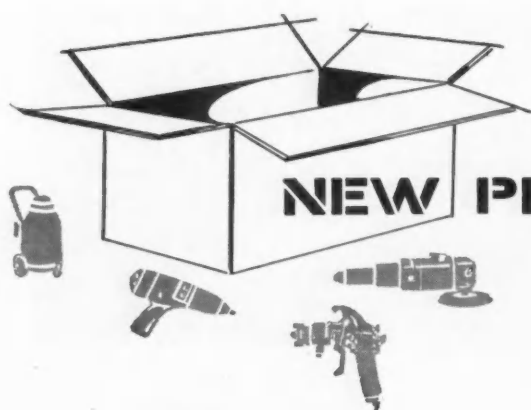
I WOULD suggest running a hot wire to the coil primary then if it starts the trouble could be due to a faulty neutral limit switch or possible a poor ground connection at the dash. I ran into a similar experience on a Cadillac recently. The cylinder heads had been taken off and when they were put back the ground straps from the firewall to the heads were not connected. This was hard to start too. Connecting the ground straps cured his trouble.

Adjusting Carter 4-Barrel Carburetors

We would like to know the correct procedure for adjusting the idle speed and mixture on a Carter four barrel Carburetor.
Florida Subscriber

AS a preliminary setting, turn air screw out $2\frac{1}{2}$ turns from lightly seated position and mixture screws out 1 turn. Set hand brake securely, place transmission in neutral and connect tachometer to engine. Start engine and warm up thoroughly. Make sure choke is fully open and carburetor is completely off fast idle. Adjust the air screw to obtain correct idle rpm with automatic transmission set in drive range. Turn mixture screws to best and smoothest idle. Reset air screw to correct rpm if mixture adjustment changed setting. Recheck mixture adjustment to insure smoothest idle.





SHOW WINDOW



320. Nylon Coupling

Morse Chain Company: The addition of a new, lubrication-free nylon coupling to its line of flexible couplings has been announced by Morse Chain Company. Corrosion-resistant, the chain element of the new coupling is constructed of nylon segments and stainless steel pins. It can be disassembled or connected at any link without special tools, and fits standard, stock steel roller chain sprockets. The company adds that the new coupling needs no protective cover. Handles loads from fractional to 40 hp and speeds from 500 to 5000 rpm.



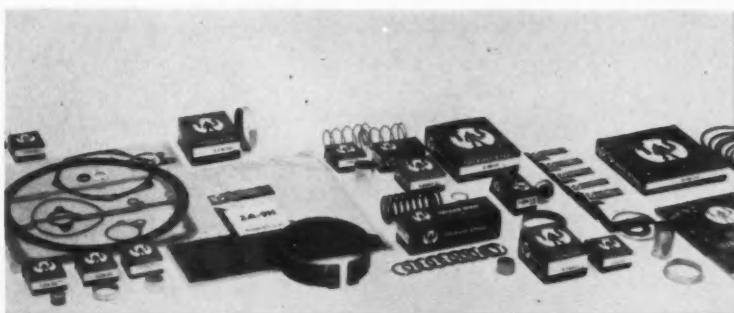
321. Power Brake Repairs

Wagner Electric Corp.: Five types of kits are marketed in the new line, including single package kits, major kits, minor kits, packing kits and poppet valve kits. Single package kits contain all parts normally required in a complete overhaul. Major and minor kits contain gaskets and rubber parts for major or minor overhauls. Each kit contains clear instructions for step-by-step disassembly, repair and assembly.

(Continued on next page)

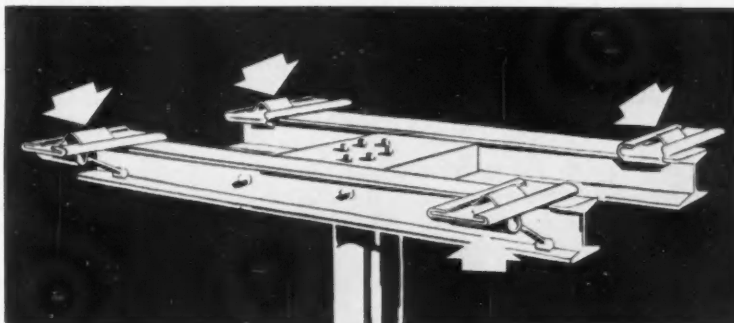
322. Transmission Parts

Toledo Steel Products: Has a complete line of automatic transmission parts for the replacement market. Packaging is brand new. It features polyethylene-covered kits for gaskets and seals, assembled for specific jobs, and protected against heat and moisture. Illustrated are about 100 items of a line of more than 1200 parts.



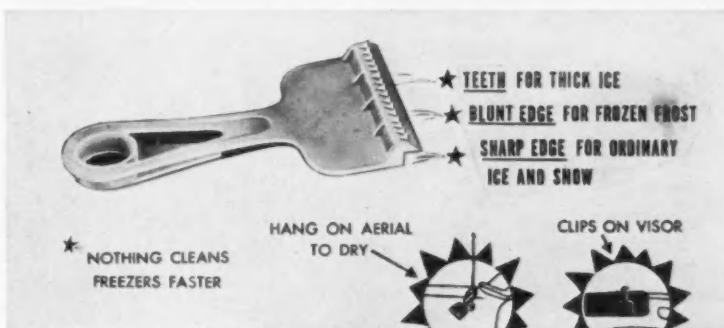
323. Conversion Kit

Beverly Equipment Sales Company: A new frame contact conversion kit engineered and designed to convert rail lifts to frame contact lifts is now available. The company claims safe frame contact on any make of car, foreign or domestic. The kit can be installed quickly and easily, in matter of minutes.



324. Scraper Brush

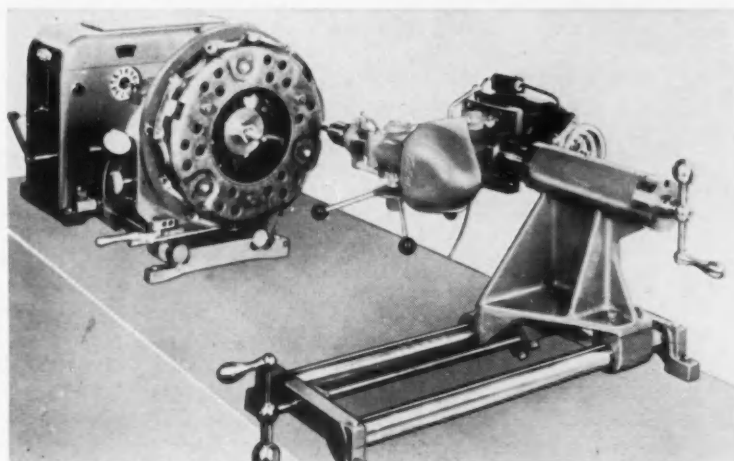
Mark Mfg. Company: A new snow brush named "SQUEEGEE-SWEEP" with a polyethylene brush. The manufacturer claims bristles will retain their shape indefinitely. On the back edge of the brush is a 7 inch blade which doubles as a scoop for heavy snow and an effective squeegee.



325. Clutch Balancer

Bear Mfg. Company: A new balancing machine designed specifically for use by clutch rebuilders has been announced. Accuracy and speed are the principal features of the Balancer. A precision dial indicator registers the exact amount of unbalance while a strobe light is used to indicate the position. When drilling for correction of unbalance, a special backing plate is used for locking out the pick-up mechanism.

(Continued on page 70)

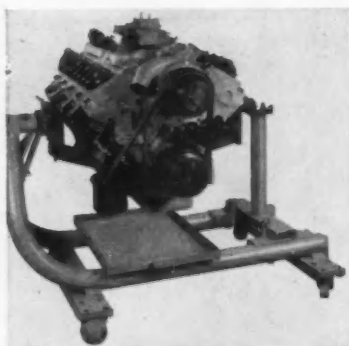


New Products Continued from Page 69



326. New Reducer

Pittsburgh Plate Glass Company: A new automotive enamel reducer that provides dependable control of spraying enamel in spite of adverse weather conditions has been announced by the company. The product is said to provide smooth, even flow out, and perfect leveling. Particularly effective on metallic particles for more accurate color matching. It may also be used under a complete range of air pressures. With either the double coat method or the tack and flow coat method of spraying.



327. Repair Stand

Manzel, Div. Of Houdaille Industries, Inc.: Designed for servicing heavy truck engines, differentials and transmissions.

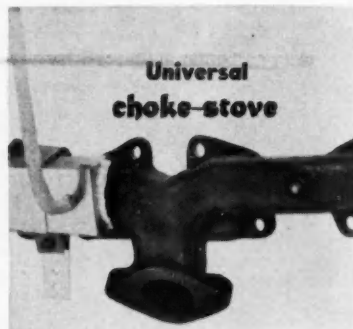
The fixed height of the support permits the load to pivot directly on the centerline of gravity. Infinite lateral positioning is provided by locking hand wheel clamps. A Flexible Mounting Plate with 2" splined shaft is built into the stand. It cushions and equalizes alignment stresses in engine block and achieves equal load distribution on both supporting members. Another feature is contracting, hand-operated, brake-type Infinite Positioning Lock. The new locking device holds the engine, transmission or other load immovable even under the most severe torqueing operations, and makes the repair stand a completely rigid work table.



328. Power Points

The Electric Auto-Lite Company: Power Points contact sets are now pre-assembled and pre-aligned and have a nylon arm design for bounce-free performance at high speeds. Replacement time is reduced 50 per cent with the use of the points, according to the company. Positive alignment eliminates need of point alignment during installation and a resilient nylon rubbing-block guarantees superior wearing qualities. Natural lubricity of the nylon arm reduces

the rate of high speed point erosion and low speed point transfer.



329. Choke-Stoves

Brake Parts Specialty: Now has a line of custom fitting Choke-Stoves a universal model to fit all manifolds. The universal Choke-Stove uses the BPS asbestos pad for draft-proof air tight seal. Mounts easily, quickly, and securely to any manifold.



330. Portable Starting Unit

United Motors Service: A portable emergency starting unit has been announced. It is said to be compact and easy to carry, weighing only 16 pounds, less battery. The Delco Start-O-Pak enables one man to start a six-volt or 12-volt vehicle. It is equipped with a remote control button which operates a solenoid switch.

(Continued on page 72)

You Are Qualified to be a Member Of The Automotive Service League

This is a new and unusual organization open to all automotive service shops which have been qualified by Motor Age. If you haven't done so before, detach and return the postage free postcard below.

[The second and lower postcard is for more new product information.]



**FOR
LEAGUE
MEMBER-
SHIP**

Please Note!
When filling out cards—
be sure to sign your
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**FOR
NEW
PRODUCTS**

To MOTOR AGE

Please send me our membership plaque in the **AUTOMOTIVE SERVICE LEAGUE**.

We operate a
(check one)

☐ Car Dealership
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☐ Service Station
☐ Specialty Shop

There are full time mechanics at our location.

Your Company

Your Name Your Title

Address
(Street & No.) (City) (Zone) (State)

Frank P. Tighe, EDITOR MOTOR AGE
P.O. Box 102, Village Station, N. Y. 14, N. Y.

11/58

Please send me further information on the New Products, the code numbers of which I have circled below. (Be sure to circle the code number).

320	321	322	323	324	325	326	327	328	329
330	331	332	333	334	335	336	337	338	339
340	341	342	343	344	345	346	347	348	349
350	351	352	353	354	355	356	357	358	359
360	361	362	363	364	365	366	367	368	369
370	371	372	373	374	375	376	377	378	379
380	381	382	383	384	385	386	387	388	389
390	391	392	393	394	395	396	397	398	399

[Postcard valid for 90 days only.]

Your Name Your Title

Your Company

Your Business: Wholesaler Repair Shop Car Dealer

Address
(Street & No.) (City) (Zone) (State)

New Literature

331. IGO Manual

Independent Garage Owners of America, Inc.: A manual on "How To Organize A Local IGO Unit." It outlines reasons for forming a unit and the steps necessary to facilitate its formation.

One section covers articles of incorporation. Another section explains IGO's program development. Under this category the association's educational and advertising programs, budget plan and collection system are presented.

A guide for officers and

members of the board is also given. The last two sections of the manual gives information on the association's record forms and explains how IGO helps its members improve sales and services.

332. Ammeter Catalog

Columbia Electric Mfg. Co.: New eight-page catalog on Tong Test AC-DC Ammeters has just been released. It illustrates eight types of instruments. Gives detailed information on the selection, ordering and use of Tong Test Ammeters. Actual size scale ranges are shown to assist in the specification of desired

ranges. Special Tong Tests for Low Current Readings are also pictured and described.

333. 8-Page Supplement

The Ken-Tool Mfg. Co.: New eight-page catalog supplement No. 4 illustrates, describes and includes specifications covering: Axle stands; new bead breaker; heavy-duty bead loosening and tire removing tools; new battery tools; a tire buffing spoon; an electric tire & tube buffer; flange type axle puller adaptor; taps, dies and screw extractors; die stocks; universal drain wrench and numerous other items.

334. Newspaper Mats

Raybestos Division, Raybestos-Manhattan, Inc.: Free newspaper advertising mats are being offered to service stations, independent garages, the car dealers. The sizes of the type of mats made available are quite varied. Raybestos reports that if the art work were prepared locally by a dealer, his cost could run to between \$200 and \$300. With the free furnished mats, however, dealer need only pay for newspaper type needed to carry his own shop or service's imprint. Plus of course, the type needed to record the price he will advertise for the "7" Point Brake Check.

335. Heater Parts

Everhot Products Co.: A 20-page illustrated catalog has been introduced and features universal heater parts, fittings and other winter goods. It provides comprehensive car application data on all popular American cars produced from 1931 thru 1958. Display assortments and open stock replacement items are fully detailed. Catalog also contains complete interchange data on small motors.

(Continued on page 85)

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In the
automotive
service business...

THERE'S NO BUSINESS LIKE CHEVROLET BUSINESS!

INDEPENDENT GARAGE OWNER:

"Much obliged. I can always depend on you to help me deliver my customers' cars on time."

CHEVROLET PARTS MANAGER:

"Thanks. Prompt service is sure important. That's why we carry a big parts inventory to serve your needs."

Here's why there's no business like Chevrolet business:

1. Nearly 16,000,000 Chevrolet cars and trucks on the road . . . more than any other make.
2. Your Chevrolet dealer can be your one-stop source for genuine Chevrolet parts.
3. Genuine Chevrolet parts are built of the same quality of materials and to the same rigid engineering specifications as the originals.
4. Your Chevrolet dealer can offer profit building service aids to help you serve Chevrolet owners.

CHEVROLET DIVISION OF GENERAL
MOTORS, DETROIT 2, MICHIGAN



MAKE YOUR CHEVROLET DEALER YOUR PARTNER IN SERVICE

... HE IS READY, WILLING AND ABLE TO SERVE YOU!



Time and work saving ideas on cars and trucks can pay off. Send Yours In Now!

\$25

FOR THE KINK
OF THE MONTH



November's Kink of the Month Is Non-Slip Device For Tow Trucks

THE wrecker operator always has some difficulty on a hard pull to hold the wrecker while operating the power winch. Either it is hard on the brake shoes or it is hard to find a tree or post to anchor on to. To solve this problem we have made two back-on shoes which are anchored to a cross bar on the wrecker frame. An old truck drive shaft (solid) was used and two steering rods $\frac{3}{4}$ inches in diameter for ease of hook up. We used two 10 inch eyebeams with angles riveted on the one end and cut out teeth for ice conditions. The only need of brakes now is to hold the wrecker so that it will not roll off the shoes. *Paul Honkavaara & Sons Co., Palmer & Negaunee Sts., Palmer, Michigan.*

\$7.50

PAID FOR
EACH KINK

Stopping Front Oil Leaks In Powerglide Transmission

We have had several '56 Chevrolet Powerglide transmissions with front oil leak. Replaced seals, pump and all gaskets without correcting leak. After pulling one transmission three times, I made a gasket to place between fluid cover and converter. This stopped the leak. I made the gasket out of brown wrapping paper, using sealer and seal both sides. *V. L. Baughmann, Viv & Howard's Auto Service, 3703 Kentucky Ave., Bartlesville, Okla.*

Gear Puller Used To Pull Nash Heads

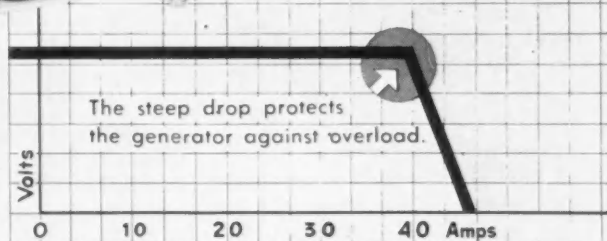
We have had trouble removing the heads on Nash "600" Statesman cars until we came upon the following idea. On these heads there are small projections on each side. A gear puller can be used to pull the head. Lay a strap iron across studs with a gear puller center drilled in it. Then pull the head part way up in front. Move to the back and repeat the process. After the head is lifted up to stud level it can be removed with ease. *Long's Repair Shop, Magnet, Nebr.*

(Continued on page 76)

**\$17⁹⁰ puts any dealer in
the Voltage Regulator
Replacement Business**

**Only 3 types of
ROBERT BOSCH
Voltage Regulators**

cover practically all 6 volt applications
(3 additional types for 12 volt)



The empty battery is rapidly recharged. The fully loaded battery cannot be over-charged. ROBERT BOSCH Voltage Regulators are the most dependable in the world.

3 ROBERT BOSCH Voltage Regulators are all you need to cover the 6 volt applications on practically all American cars and trucks (3 additional for 12 volt). Get your share of this profitable, big-volume replacement business, without the need for carrying big inventories. For full information and the name of your nearest ROBERT BOSCH distributor write:

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Time-saver When Removing Powerglide Transmissions

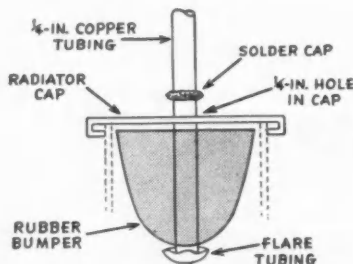
We have found how we can save time and trouble when removing and replacing '55, '56 and '57 powerglide transmissions. We just place a 2x6 from the motor pan to the front cross-member and then place a jack well ahead of the pan. In this way, we have easy access to all parts for removing and replacing. Before placing the jack in position, however, we remove the flywheel to converter bolts and the lower housing bolts. *Rudy Zinter, 15840 30th N. E. St., Seattle, Wash.*

Easy Way To Check Heat Passage in Chevy

I have a very easy way of checking heat passage on a 1955, V-8 Chevrolet. Starting the engine cold and run it for three or four minutes. Check the intake manifold on the right side of the engine, just under the carburetor. It should be just as hot as the exhaust manifold. *A. L. Posey, Hollingsworth Chevrolet Co., 1932 Park Ave., Aiken, S. C.*

Handy Tool For Testing Radiators

I have made a handy tool for testing radiators. Use a rebound rubber bumper that is used on



a Chevrolet spring. Cut the big end off to fit the depth of the filler neck. Drill 1/4 inch hole

through rubber. Press 1/4 inch copper tubing through rubber. Saw end of tubing 1/4 inch down and fold out to keep tubing from pulling out. Cut tubing about 6 inches long. Drill 1/4 inch hole in center of a radiator cap. Slip over tubing. To keep cap from coming off put a ring of solder on tubing 1/4 inch from cap. You can use this method and not have to test through overflow pipe. *H. C. Hovis, Hovis Radiator Repair Co., 801-803 S. Church St., Charlotte, N. C.*

Tool For Adjusting Transmission Bands

The tool I made makes an easy job of adjusting Chrysler product's transmissions. It consists of a 3/8 inch combination wrench with a piece of 7/16 in. Allen wrench. You weld the Allen stock into end of wrench allowing it to come out 3/4 in. on each side. Then you can use 7/16 socket and ratchet in any position to ad-



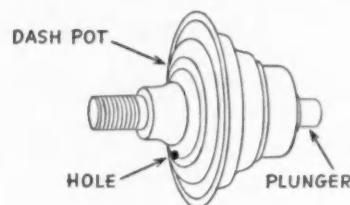
just bands. *Edward Snyder, Edgewood Service Center, Old Country Rd. & Cherry Lane, Carle Place, L.I., New York.*

Masking Tape Used To Hold Gaskets In Place

I find that Motor Age means so much to me. I especially like to read and take advantage of the "Shop Kinks." I have one that has helped me very much in our work. In replacing Ford V-8 valve cover gaskets, I find that it is very hard to get the gaskets to stay in place while putting the cover on. I have used gasket compound, but it doesn't work too well. The trouble can be eliminated by using masking tape. *Carroll Stewart, Stewart's Garage, Route 1, Landrum, S. C.*

Way To Eliminate Sticking Dash Pots

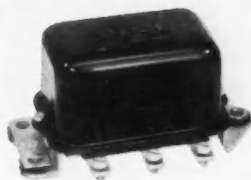
We have a quick and permanent cure for eliminating stick-



ing dash pots which are used on nearly all automatic transmission cars. By drilling or punching with a sharp punch a 1/64 hole on the rear side of the dash pot, we find this will eliminate sticking of dash pot. *Daniel Stokly, Auer & Ashley Buick, Inc., 202 Main St., Lakewood, N. J.*

If you have an original idea for a special tool, a short cut on any job or any trick of value to others, write it down and if necessary make a rough sketch. Just make it clear. Send it to Motor Age. If your Kink is used it may bring you \$7.50 or \$25. All entries become the property of the Chilton Company. Because of the quantity of entries sent in, none can be returned.

**Sell
them
something
better**



ROBERT BOSCH Automotive Products

You have so much more to sell with these Robert Bosch products: Authority—the authority of the world's longest experience in manufacturing superior automotive electrical products. Range—a family of products that are standard equipment on the most famous European cars; and now again available for application on American vehicles and engines. Each bears the famous Robert Bosch trademark, each is superior in quality. You'll find it more profitable to "sell them something better." Write for catalogs and full information.

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*Registered U.S. Pat. Office. Robert Bosch GMBH, manufacturers of Robert Bosch products.

New Mercury Continued from page 50

Three basic engines are available. The 312 cu. in. V-8 is offered for the Monterey series. Carburetor is two-barrel. Horsepower is 235.

Then the 383 cu. in. engine is offered. It comes with either a two-barrel or a four-barrel carburetor. This latter combination is standard on the Montclair series, Voyager and Colony Park station wagons. Compression ratio in both cases is 10 to 1. Horsepower is 280 with the two-

barrel carburetor and 322 with the four-barrel.

The 430 cu. in. V-8 engine (with four-barrel carburetor) is standard in the Park Lane series. Compression ratio is 10 to 1; horsepower 345.

Different Roof Treatment

One of the unique features of the passenger car Mercury line is the use of two different roof styles. Hardtop models have a "cruiser" roof. It flows from the

windshield to the tip of the rear window. The sedan roof, on the other hand, is quite flat. It has an overhang at the rear end.

Departing from conventional practice, the new Mercury uses large windshield wipers working in parallel. This arrangement is aimed at cleaning a larger area of the windshield glass for both driver and front seat passengers. Electric windshield wipers are now used as standard equipment.

Power steering still retains the linkage type booster. On cars equipped with the 383 and 430

THE MOST
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TOOLS OF



ELECTRIC

SIZE 5UT 1/2" DRIVE

This famous I-R nut runner gives you 25% more electric Impacttool power. A real multi-purpose tool to ream, tap, drill—do any of 11 multi-purpose jobs. Available with exclusive optional Torsion Bar torque control . . . Ask your Ingersoll-Rand Jobber to demonstrate the amazing 5UT.

18-743



ONLY INGERSOLL-RAND GIVES YOU
5 SIZES IN ELECTRIC IMPACTTOOLS
8 SIZES IN AIR TOOLS

cu. in. engines, it becomes possible to provide a more balanced control, together with less steering effort. Steering ratio has been reduced. Effort required on the steering wheel is also reduced. Now requires about three to four pounds.

This change has been caused by relocating the power cylinder. However, the Monterey series still makes use of the linkage system introduced last year. This system requires an effort of about eight pounds on the steering wheel.

Two types of automatic trans-

missions are offered in the '59's. The single range Merc-O-Matic is of three-speed type. It is simple in construction and lower priced. The Multi-Drive or dual range Merc-O-Matic is similar to the unit offered previously.

The rear axle remains the same in basic design. It has, however, modifications to provide for the wider tread and a change in lubrication recommendations. The drain plug has been eliminated. Draining and changing of lubricant is no longer necessary.

Only a filler plug for make-up

is provided. The driveshaft is of the same design as before but is longer in keeping with increased wheelbases.

Front suspension retains the features of soft coil springs, ball joints, and swept-back lower arms. A number of things have been done to effect a better ride and improved handling. An anti-dive feature, to reduce front end dipping when braking, is one of these. It is accomplished by tilting the leading edge of the upper suspension arm upward at an angle of 12-deg. from the horizontal.

MECHANICS COAST TO COAST

AIR

SIZE 403B 1/2" DRIVE

Handle all but the very largest nuts on cars and trucks with the lightweight 403B Impactool. The 403B—which weighs only 5 lbs.—is the most powerful tool of its size—a Select-Air regulator permits control for safe use on small jobs—an air compressor as small as 1 1/2 hp will operate this tool. Compact design lets 403B fit into close quarter jobs, reduces operator fatigue. See your I-R Jobber for a convincing demonstration.

18-743-1

Ingersoll-Rand

11 Broadway, New York 4, N.Y.



Sports page Continued from page 33

way we didn't fish long. That was Charley's fault, the dope.

"He stepped off a log and fell down and broke his leg. After that it was kind of distracting trying to concentrate on fishing with him lying there groaning, so we gave up and put him in the boat and came on home.

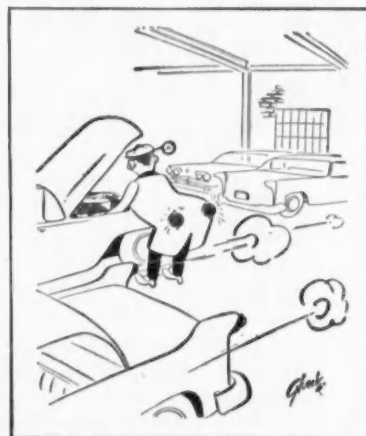
"With his broken leg, he got out of helping to clean the fish. Some guys have all the luck.

"But I tell you, you should have been around. You never saw anything like it, the way the water boiled with fish. I made some movies of it and if you've got a little time I'll show 'em to you."

Well, now that was something special. A fish story backed by visual evidence is something you don't run into every day. The man set up his movie projector

and sure enough, this was the Everglades country all right. The camera followed the banks of the canal as the boat went up against the moderate current. There were the tangled thickets, the pale and twisted snarl of swamp growth, the palmetto, the water hyacinth, the clouds of white egrets in flight or clustered on the stunted brush.

There were a couple of shots of Charley landing bass, his fly-rod bent double and the fish leaping and splashing. And then, here was the mouth of a crevasse, and here the water boiled white. The current was fast, but not fast enough to make white rapids. It was bass that set this water astir, dimpling and splashing and bubbling and swirling as the large mouth ripped into their banquet of minnows. It looked like the old swimming hole occupied by a troop of uncommonly boisterous Boy Scouts.



This was the time to suggest that maybe another trip down to that same canal—

"Oh," the man said, "that wouldn't be any use. The water's all gone down now. The minnows are gone and the bass wouldn't be around there any longer. No, you should have been around a few days ago."

"I'll tell you what, though," the man suggested. "We could take the boat and go to one of
(Continued on page 86)

PASSENGER CARS

SMALL ENGINES & MAGNETOS

SERVICE PARTS FOR SMALL ENGINES AND MAGNETOS

UNIT BREAKDOWN OF DISTRIBUTORS, GENERATORS AND STARTERS

3 NEW WINDOW DISPLAYS IN 6 COLORS

HEAVY DUTY VOLTAGE REGULATORS

P&DIZE

MORE ELECTRICAL SYSTEMS WITH THESE SALES HELPS...

6 NEW CATALOGS OF P & D PARTS

Plus—A Technical Book on "Causes & Cures of Ignition Troubles"—Price \$1 a copy

And—The New P & D-ize slogan backed by a 12 month warranty on all parts!

Mobile Display signs • New Tune-up Chart • New Decals • A revised Field Program of cooperation between jobbers, dealers and P & D representatives.

All of which spells one thing only for you—**MORE SALES!**

Can you afford to ignore P & D-izing? Write us now.

P & D MANUFACTURING CO., INC. Established 1920
19-02 Steinway St., Long Island City 5, N. Y.
Export Sales: Berg Warner International, 34 So. Wabash Ave., Chicago 2, Ill.

For Longer and Better Engine Life...

P&DIZE YOUR ELECTRICAL SYSTEM

RECEIVE 12 MONTHS UNLIMITED WARRANTY

TOP NOTCH Tune-Up Jobs

COILS

MARINE ENGINES

TRUCKS, BUSES & TAXIS

INDUSTRIAL ENGINES & FARM TRACTORS

INDUSTRIAL ENGINES & FARM TRACTORS

BANNER 18" x 50" 3 COLORS

New Ford Truck Continued from page 55

In the light duty and parcel delivery models, the line includes: F-100, F-250, F-350-conventional models with GVW ratings of 5000, 7400, and 9800-lb. respectively; four-wheel drive F-100 and F-250 with GVW ratings of 5600 and 7400-lb. respectively; and the P-350, P-400, and P-500 parcel delivery models, with GVW ratings of 8000, 10,000 and 15,000-lb. respectively.

The angle of approach on both the F-100 and F-250 has been increased by raising the level of the front bumper. This permits greater freedom for both off-road and highway operations on sharp grades or steep ramps.

Here are some new mechan-

A new heavy duty Cruise-O-Matic is offered on the F-250, F-350 and P-350 through P-500. The new two-speed Ford-O-Matic is available on the Courier and Ranchero models only.

A 6000-lb. front axle is available on F-600 and B-600 models and comes with the 700 Series steering gear.

After January 1, Ford will

have available a new four-speed auxiliary transmission for T-800, T-850, and T-950 models in both 175- and 192-in. wheelbases.

Conventional cabs for models 700 and up are stronger. They are featuring new reinforcements for greater rigidity. Front end sheet metal incorporates stabilizer rods mounted in X-fashion to cause cab and sheet metal to move as an integral unit.



ical features offered in the light, medium, and heavy duty models. All models 500 and up have a two-shoe, internal expanding type parking brake as standard equipment, located on the rear of the transmission. Frame reinforcements extended through the rear hanger of the rear spring have been added on the two short wheelbase models of the F-and-C-750, 800, and 850 series.



Only the most reliable replacement parts should be used on automotive repair jobs. Using cheaper parts with quality less than the best can ruin a reputation. That's why reliable jobbers and repair men insist upon bolts, nuts and screw products from Lamson & Sessions' complete line of original equipment fasteners...from the world's largest and most dependable maker of automotive fasteners!

The Lamson & Sessions Co.

5000 TIEDEMAN ROAD, CLEVELAND 9, OHIO • PLANTS AT CLEVELAND & KENT, OHIO • CHICAGO • BIRMINGHAM

Know the Law Continued from page 48

Court of Appeal for the Parish of Orleans, Louisiana. The Court of Appeal sustained the Civil District Court's finding as to the negligence and affirmed the judgment as to Miss White. However, the Court of Appeal reversed the Civil District Court as to Langhoff, holding that he was liable because Simmons was his agent.

The Supreme Court of Louisiana ordered the case up on the application of Langhoff. Not however, for the purpose of inquiring into the question of negligence. The Supreme Court accepted the findings of the Court of Appeal as to that. But for the purpose of reviewing the judgment of the Court of Appeal holding that as a matter of law

Langhoff was liable to Mrs. Herbert for damage she sustained on account of the negligence of Simmons.

SIMMONS was in no way connected with Langhoff's business. He washed cars on his own account, not on Langhoff's premises, but on the adjacent street. Langhoff had no wash rack; did not wash cars as a part of his business. There was nothing about the premises to indicate that he did.

Simmons had been permitted by Langhoff to stay on and about his premises and to pick up such wash jobs as he could. When Mrs. Herbert drove up to the filling station, Langhoff was absent. The only person she saw there was Simmons. There were two mechanics in the repair department, but they did not see her, nor did she see them.

Simmons sold her the gasoline, and upon that act of his and that alone she based her contention that Langhoff was precluded from denying the agency. But Simmons was not authorized to make that or any other sale of gasoline. If he had ever made any other sale, it was not pretended, much less shown, that Langhoff knew anything about it.

The Supreme Court set aside the judgment of the Court of Appeal insofar as it held Langhoff liable. The Court upheld the judgment of the Civil District Court, which rejected Mrs. Herbert's demands against both Miss White and Langhoff.

Denver to Host '59 IGO Meeting

The 1959 National IGO of America Convention will be held in Denver, Col., at the Albany Hotel. Dates will be June 24 through 27. Bill Kenz of the Metropolitan Denver Branch has been named chairman of committees of the Denver Branch to make preparations for the national program.

Chilton's MOTOR AGE, NOVEMBER, 1958

CUSHIONED FENDER PROTECTOR

\$7.00 value for \$2.49
when purchased with our Water Pump Plan



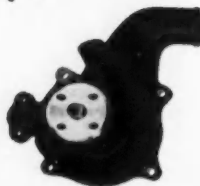
- All-Vinyl Plastic
- Covers entire fender
- Sponge rubber underlining clings to fender
- Won't slip, won't crawl, won't stain
- Resistant to oil, grease and alcohol
- Wipes clean
- Protects fender from dropped tools, from button and belt buckle scratches

Plus FREE 4-color wall banner...two colorful streamers promoting water pump replacement...water pump chart with application and prices.

PROFIT NOW...PAY LATER

on **McQUAY-NORRIS**
WATER PUMPS

*All-New
Pre-Tested*



Just order any five water pumps covered in our deferred payment plan. You get immediate delivery, you pay later on terms arranged directly with your wholesaler. Don't pass up this great opportunity!

SEE YOUR McQUAY-NORRIS WHOLESALER FOR FULL DETAILS
McQUAY-NORRIS MANUFACTURING CO. • ST. LOUIS • TORONTO

Instruments Don't Guess

Continued from page 54

One question always asked in connection with an exhaust gas analyzer is, "Are no-load combustion tests of any real value?" The answer is "Yes, no-load combustion readings are of very real value." The mixture may be different under load than at no-load but, if a carburetor performs properly at no-load, one can safely predict that it will function properly under all other conditions. After all, the same jets, air bleeds, venturis and float levels are involved under both conditions, therefore, the no-load and load mixture curves will have a direct relationship.

AMMETER

Since the charge indicator light has appeared on a high percentage of instrument panels, the test ammeter has become a must for any mechanic. Although the ammeter is generally used with the charging circuit, it also has been helpful in determining the amount of current each electrical unit draws.

Suspected electrical defects can be successfully diagnosed with the use of an ammeter, particularly when the amperage draw exceeds the fuse or circuit breaker capacity. When the vehicle has a dash ammeter, the test ammeter should connect in series with it to check the accuracy of the dash unit. In most cases, the dash ammeter is not accurate enough to use as a guide in setting the current regulator.

VOLTMETER

No serviceman should consider shooting trouble on a vehicle electrical circuit without a voltmeter. The wiring circuits are as important as the electrical units themselves.

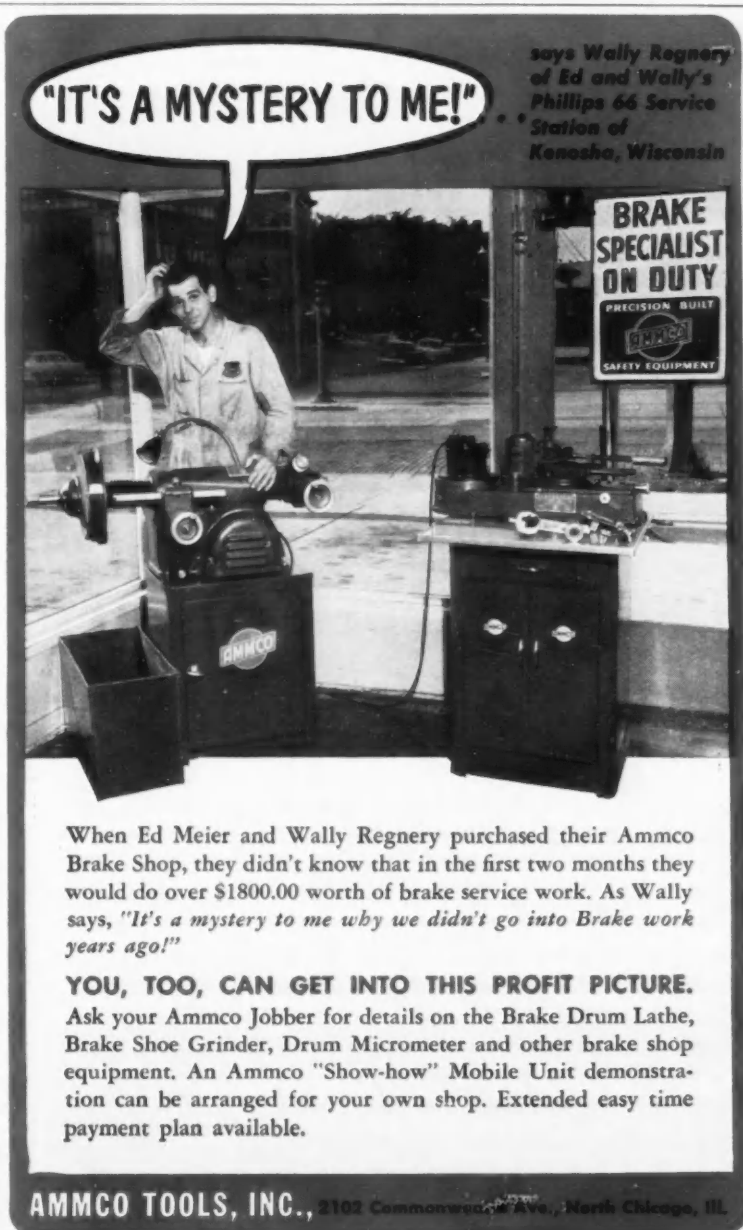
One will find that a generator and regulator may function well as individual units, but tied together with the vehicle

wiring system they would not function properly, due to line resistance.

The voltmeter will show voltage loss at various points of the electrical system and aid the mechanic in finding the cause. Introduction of resistor units into the ignition system or generator-regulator system offers more use for the voltmeter. Par-

ticularly, this is true, now that some major manufacturers are going to constant voltage gage systems. Ford operates the fuel, oil and heat indicator gates on 5 volts. The voltmeter will measure the amount of drop across the resistor units.

Although primarily used in checking generator output, the voltmeter offers the mechanic a versatile tool capable of testing the complete vehicle wiring system.



says Wally Regnery
of Ed and Wally's
Phillips 66 Service
Station of
Kenosha, Wisconsin

"IT'S A MYSTERY TO ME!"

**BRAKE
SPECIALIST
ON DUTY**
PRECISION BUILT
SAFETY EQUIPMENT

When Ed Meier and Wally Regnery purchased their Ammco Brake Shop, they didn't know that in the first two months they would do over \$1800.00 worth of brake service work. As Wally says, "It's a mystery to me why we didn't go into Brake work years ago!"

YOU, TOO, CAN GET INTO THIS PROFIT PICTURE.
Ask your Ammco Jobber for details on the Brake Drum Lathe, Brake Shoe Grinder, Drum Micrometer and other brake shop equipment. An Ammco "Show-how" Mobile Unit demonstration can be arranged for your own shop. Extended easy time payment plan available.

AMMCO TOOLS, INC., 2102 Commonwealth Ave., North Chicago, Ill.

Campbell's Garage Continued from page 41

er's mind. He knows his car will receive every personal attention warranted. One helpful service, outside their garage confines, could also be classified as subtle but effective advertising. This is a free service they offer sports-minded Denver.

During racing season and American Association ball games, one of Campbell's staff

service cars is stationed at the park to aid any motorist in case of car trouble.

"The park announcers cooperate with us. Prior to the nightly closing of the event they announce our free service," added Ray. "We like to think this good will offer has been responsible for our increased business."

That business is good is sup-

ported by the records. A typical week's work would show the following: two transmission jobs, 6 brake, 11 major repairs completed (such as clutches, universals, etc.). Also 11 body jobs, 12 front-ends or alignments, 12 paint jobs. Then 43 miscellaneous jobs such as electrical, fuel pump, tune-ups.

Firmly believing in community affairs, the Campbell's maintain contact through active memberships in the local organizations. For example, the Chamber of Commerce, the Better Business Bureau. The Campbell's also have purchased an old-time fire engine for free use by the Junior Chamber of Commerce chapter of Denver.

Fully confident of the future, Campbell optimism radiates through-out the garage. Ray's daughter recently presented her father with a special sign. He has placed it above the cash register: "This is not a Recession . . . It's only the mildest boom in History."



- ☆ **MOST COMPLETE COVERAGE**
- ☆ **HIGHEST TAPPET QUALITY**
- ☆ **SINGLE-PRODUCT SERVICE**

Johnson, as the industry's only exclusive tappet manufacturer, has devoted all of its engineering and service efforts toward giving you the best line of hydraulic and mechanical tappets on the market. Johnson pioneered tappets for the replacement field, developed the popular adjustable tappet for Ford L-Head engines, offers the most complete tappet line available, and still holds your stock inventory lower. Get the Johnson Tappet habit . . . today.



"The most complete tappet line"

JOHNSON  PRODUCTS
INC.

MUSKEGON, MICHIGAN

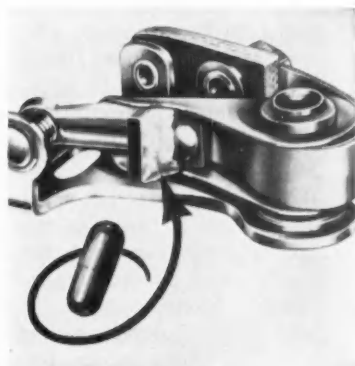
Lincoln Continued from page 59

has a fully automatic and modulated shift between first and second gear. It provides for an automatic low-gear start and considerably reduced converter slippage.

Some important improvements have been made in the driveline. Every driveshaft is given an index mark during balancing for coupling with a similar mark on the axle yoke or axle companion flange. These matched components help to compensate for any slight out-of-balance condition. Adds to quiet running operation.

Among standard equipment this year on the three series of Lincoln and Mark IV Continental cars are power steering and power brakes.

New Products Continued from page 72



336. Cam Lubricant

Echlin Mfg. Company: Protect-A-Point, a specially developed cam rubbing block lubricant contained in a small medical-type capsule, is now packed with every Echlin Contact Set and Contact Assembly. This brand new lubricant stops rapid wear and is easily and conveniently applied directly from the capsule to the rubbing block when new Ignition Contacts are installed. Protect-A-Point lubrication continues for the life of the contacts and helps maintain correct spacing between points.



337. Grinding Wheel

Mermac Products, Inc.: A new type expanding grinding and polishing wheel made of rubber and using coated abrasive

It's a good idea to get in on the ground floor, but be sure that the elevator is running.

bands has been announced. The wheels, composed of metal hubs to which rubber is molded, eliminate the need for backstand- idlers in the use of coated abrasives. The abrasive band is fitted loosely around the wheel while at rest. When the wheel is brought to operating speed, centrifugal force causes it to expand and grip the band.



338. Valve Lifter Puller

Owatonna Tool Company: A new Hydraulic Valve Lifter
(Continued on page 87)

New

POWER BRAKE KITS and PARTS
for Passenger Car and Truck Applications

Write for Catalog
EIS AUTOMOTIVE CORP., MIDDLETOWN, CONN.

Epoxy Plastic Continued from page 61

ing to manufacturer's directions. Directly after mixing epoxy paste, proceed with its application.

To apply epoxy paste, pre-heat area to be repaired with heat lamp or torch until it sizzles enough to eliminate moisture. Do not use torch near flammable vapors, upholstery or insulation. With a putty knife or rubber

squeegee, apply mixed epoxy paste over area to be repaired. Puddle material in thick sections to work out entrapped air. Smooth over area and feather out paste. Always move squeegee in same direction. Use sufficient paste for desired contour after sanding.

Cure epoxy paste by one of the following methods. Flash cure

with torch approximately one to five minutes. Use care not to warp panel or scorch paste. Cure with heat lamps approximately three to ten minutes with 300 watt lamp, six inches from paste. Use greater distance with additional lamps. At room temperature paste will cure in two to four hours at 75 degrees F. When certain all epoxy paste has become solid, the repaired surface is ready for finish sanding.

For final sanding operations use No. 50-grit abrasive paper. This will cut down any remaining high spots and restore the original contour. Be sure not to undercut any areas as additional fill will be required. Next, the final finishing and smoothing for painting is done. By sanding with No. 80-grit open-coat abrasive paper, on a belt sander or disk sander.

Heart and mind may make the man, but a little sunshine greases his way through life.

Sports Page

Continued from page 80

the lakes around here. There's a lake for every orange tree in this area, you know. I don't know how much luck we might have, but take a look at the pictures on this other reel here. The best you see there is a bass that was taken out of a lake right near here. Weighed exactly fifteen pounds on my scales. Look, I took this shot of him alongside that little boy. See, he's almost exactly as tall as the kid. Look at that mouth on him. We didn't try it, but it looks as though the kid could put his head in the fish's mouth without scratching his ears, doesn't it?"

So that's why the dateline of this piece is Avon Park instead of Hialeah. The horses can wait.

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Chilton's MOTOR AGE, NOVEMBER, 1958

for the BIG LIFT in ignition sales and service!

There's a big, new ignition market in those small foreign cars and the Tungsten bubble-pak Tune-Up Kits provide coverage for most of them!

EACH KIT CONTAINS HEAVY-DUTY CONTACT POINTS AND CONDENSER.

Order at once — give your ignition business the BIG lift in sales and profits!

Merchandised on a lithographed metal display rack. The FC-1000 (illustrated) holds 18 Kits — and the rack is FREE!

Write for the new Foreign Car Catalog FC. TUNGSTEN CONTACT MFG. CO., North Bergen, N. J.

New Products Continued from page 85

Puller Set, for removing hydraulic valve lifters from straight and V-8 automobile engine blocks has been introduced by the company. This simple effective tool removes frozen valve lifters quickly and easy. After removal of the lifter spring clip, the jaws of the Hydraulic Valve Lifter Puller are fitted into the spring clip groove of the lifter. As pressure is applied the jaws of the tool expand and grip the lifter tightly allowing it to be withdrawn easily.



339. Wheel Cover Remover
Vulcan Mfg. Company: Has a new tool specifically for the purpose of efficiently removing and replacing all makes of automotive wheel covers. The tool has a specially curved single claw extractor with a flexible rubber head to prevent marring and denting, yet drives the cover securely in place.



340. Handi-Cleaner
DL Products, Inc.: The mak-

ers of the original waterless cream type cleaner, used with or without water, now introduce New Liquid DL Handi-Cleaner. Perfected after several years of research, the company claims this is the first, automatic, self dispensing, waterless liquid hand cleaner to be used with or without water. It can be used anywhere . . . at the gas pump

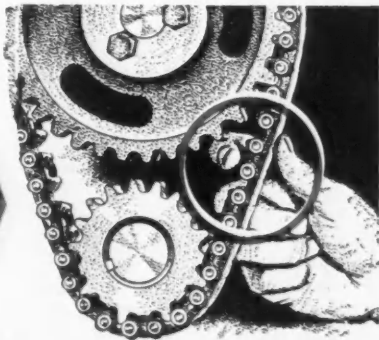
as conveniently as in the wash-room.

341. Plastic Paste

Baird Dynamic Corp.: Has an entirely new type of plastic paste for autobody repair, reconditioning, customizing and reinforcement. Known as FILLER-ite, this plastic paste uses a powder-type catalyst that lets the user speed up or slow down curing time by merely adding
(Continued on page 95)

WHY and WHEN

it's time for
a change
to LINK-BELT
timing chain



FINGER-GRIP TEST tells when. Remove timing chain cover and crank engine to get all slack on one side of chain. Using thumb and index finger, grip the slack side of the chain midway between the two sprockets. Move chain in and out toward center line of sprockets. More than a 1/2-in. lateral movement indicates worn chain.

This damage results from worn timing chain



PLUG FOULING.
Creates fuel waste, reduced economy.



SCORED CYLINDERS.
Loss of compression, waste oil and fuel.



BURNED VALVES.
Cause fuel waste, cut engine efficiency.



DAMAGED PISTONS.
Result of backfire through carburetor.

Protect your customer and your reputation. Install Link-Belt timing chain. Assure your customer accurate valve timing for miles of top engine performance and economy.

See your jobber and ask for Link-Belt timing chain by name. It's the world's finest original equipment line . . . designed, engineered and manufactured by Link-Belt Company.

LINK-BELT

TIMING CHAIN AND SPROCKETS

LINK-BELT COMPANY: 220 South Belmont Ave., Indianapolis 6, Ind. Warehouses in all principal trading areas.

14,938

CURRENT PASSENGER CAR PRICE, WEIGHT AND BODY TABLE

Following are prices at factory for cars with standard equipment as of October 15, 1958
State or local taxes, transportation and finance charges and optional equipment are extra.

BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	BODY MAKE AND MODEL	List Price at Factory without Federal Taxes	Federal Taxes and Handling Charges	Suggested Price at Factory including Federal Taxes	Shipping Weight	
AMERICAN MOTORS CORP.					CHRYSLER CORP. cont'd					FORD MOTOR CO. cont'd					GENERAL MOTORS, cont'd					
RAMBLER†					DODGE, Cont'd					FORD, Cont'd					CADILLAC, Cont'd					
American					Lancer, 4d	2993	236	3229	3745	Sunliner	2548	203	2749	3630	Eldorado					
Sedan, 2d	1754			2476	Convertible	3125	247	3372	3820	Skyliner	2907	231	3138	4069	Biarriz	6617	584	7401		
Del. Sta. Wag.	1884			2554	Sta. Wagons					Sta. Wags. V8					Seville	6617	584	7401		
Sup. Sta. Wag.	1963			2570	Sierra, 4d, 2s	2829	224	3063	3940	Ranch Wag. 2d	2293	186	2479	3620	Series 75					
Six					Sierra, 4d, 3s	2941	233	3174	4015	Ranch Wag. 4d	2343	190	2533	3677	Limousine, 9p			9533	5490	
Del. Sedan, 4d	1918			2934	Cust. Sier., 4d, 2s	3029	239	3268	3980	Del Rio Wagon	2392	193	2585	3625	Sedan, 9p			9748	5570	
Sup. Sedan, 4d	2071			2951	Cust. Sier., 4d, 3s	3141	248	3389	4020	Ctry. Sed., 6p	2442	187	2639	3682						
Hardtop, 4d	2141			2961	IMPERIAL†					Ctry. Sed., 9p	2542	204	2746	3750	CHEVROLET†					
Cus. Sedan, 4d	2178			2956	Custom					Thunderbird	2663	213	2876	3787	Biscayne V8			2365	3550	
Sup. Sta. Wag.	2246			3082	Southampt., 2d	4469	351	4820	4675	Tudor					Sedan, 2d			2419	3615	
Cus. Sta. Wag.	2452			3097	Sedan, 4d	4568	358	4926	4735	Convertible	3330				Sta. Wagon, 2d			2689	3840	
Rebel V-8					Southampt., 4d	4568	358	4926	4745	LINCOLN					Bel Air V8			2756	3920	
Sup. Sedan	2192			3287	Crown					Capri					Sedan, 2d			2504	3570	
Cus. Sedan	2299			3295	Southampt., 2d	4928	385	5313	4810	Hardtop, 2d	4415				Sedan, 4d			2558	3640	
Hardtop	2389			3338	Sedan, 4d	5155	403	5558	4840	Sedan, 4d	4553				Sta. Wag., 4d, 6p			2867	3960	
Sup. Sta. Wag.	2466			3398	Southampt., 4d	5155	403	5558	4840	Hardtop, 4d	4553				Sta. Wag., 4d, 9p			2970	3980	
Cus. Sta. Wag.	2573			3407	Convertible	5273	411	5684		Premiere					Impala V8			2710	3650	
Amb. V8					Le Baron					Hardtop, 2d	4894				Sedan, 4d			2717	3605	
Sup. Sedan	2369			3428	Sedan, 4d	5570	433	6003	4865	Sedan, 4d	5124				Hardtop, 2d			2782	3675	
Cus. Sedan	2504			3437	Southampt., 4d	5570	433	6003	4875	Hardtop, 2d	5124				Hardtop, 4d			2967	3655	
Hardtop	2588			3483	Limousine	14579	1021	15600	5960	Continental					Convertible			3009	3970	
Sup. Sta. Wag.	2643			3546	PLYMOUTH†					Coupe, 2d	5367				Sta. Wag., 4d, 6p					
Cus. Sta. Wag.	2778			3562	Savoy 8					Sedan, 4d	5587				Corvette					
Hdt. Sta. Wag.	2882			3591	Club Sedan	2138	214	2382	3390	Hardtop, 4d	5587				Sports Car			3675	2900	
CHRYSLER CORP.					Sedan, 4d	2185	217	2402	3425	Convertible	5782				OLDSMOBILE†					
CHRYSLER†					Belvedere 8					MERCURY					Series 88					
Windser					Club Sedan	2284	225	2509	3395	Monteury					Sedan, 2d	2574	263	2837	4040	
Sedan, 4d	2909	230	3139	3800	Sedan, 4d	2331	228	2569	3430	Sedan, 2d	2422				Celeb. Sedan, 4d	2634	268	2902	4130	
Hardtop, 2d	2988	236	3224	3735	Hardtop, 2d	2351	230	2581	3405	Sedan, 4d	2487				Hol. Coupe, 2d	2687	271	2958	4085	
Hardtop, 4d	3048	240	3288	3830	Hardtop, 4d	2410	254	2664	3475	Hardtop, 2d	2532				Hol. Spt. Sed., 4d	2759	277	3036	4165	
Convertible	3296	259	3555	3950	Convertible	2568	246	2814	3589	Convertible	2822				Convertible	2991	295	3286	4120	
Twn. & Ctry, 2s	3362	264	3626	4045	Fury 8					Hardtop, 4d	2986				Fiesta	3065	300	3365	4465	
Twn. & Ctry, 3s	3536	277	3813		Sedan, 4d	2453	238	2691	3455	Convertible	2922				Super 88					
Twn. & Ctry, 3s	3536	277	3813		Hardtop, 2d	2475	239	2714	3435	Sedan, 4d	2966				Celeb. Sedan, 4d	2881	297	3176	4135	
Saratoga					Hardtop, 4d	2528	243	2771	3505	Hardtop, 2d	3011				Hol. Coupe	3020	308	3328	4090	
Sedan, 4d	3609	282	3891	4010	Suburban 8					Hardtop, 4d	3096				Hol. Spt. Sed., 4d	3092	313	3405	4185	
Hardtop, 2d	3685	286	3951	4070	Deluxe, 2d, 6p	2456	238	2694	3690	Trnk. Crul., 2d	3210				Convertible	3268	327	3595	4135	
Hardtop, 4d	3737	292	4029	4335	Deluxe, 4d, 6p	2518	243	2761	3725	Trnk. Crul., 4d	3284				Fiesta	3336	333	3669	4485	
New Yorker					Custom, 2d, 6p	2568	246	2814	3690	Park Lane					Series 98					
Sedan, 4d	4020	314	4334	4120	Custom, 4d, 6p	2630	251	2881	3730	Hardtop, 2d	3555				Celeb. Sedan, 4d	3533	357	3890	4390	
Hardtop, 2d	4058	318	4386	4080	Sport, 4d, 6p	2732	259	2991	3775	Hardtop, 4d	3626				Hol. Coupe	3715	371	4086	4360	
Hardtop, 4d	4121	322	4443	4165	Sport, 4d, 9p	2760	261	3021	3760	Convertible	3788				Hol. Spt. Sed., 4d	3788	376	4162	4455	
Convertible	4453	347	4800	4270	Spt. Fury 8	2862	269	3131	3805	Combr., 2d, 6p	2778				Convertible	3975	391	4366	4360	
Twn. & Ctry, 2s	4553	354	4907		Hardtop, 2d	2673	254	2927	3475	Combr., 4d, 6p	2943				PONTIAC†					
Twn. & Ctry, 3s	4753	369	5122	4360	Convertible	2657	268	3125	3670	Voyager, 2d, 6p	2932				Catalina					
300-E					FORD MOTOR CO.					Voyager, 2d, 6p	3243				Sport Sedan, 2d	2390	243	2633	3855	
Hardtop, 2d	4852	377	5229	4290	EDSEL					Voyager, 4d, 6p	3243				Sedan, 4d	2456	248	2704	3940	
Convertible	5252	407	5659	4350	Ranger				3729	Voyager, 4d, 6p	3336				Coupe	2515	253	2768	3885	
DE SOTO†					Hardtop, 2d	2368			3805	Col. Pk., 4d, 6p	3466				Viata Sed., 4d	2586	256	2844	3990	
Fireweed					Hardtop, 4d	2446			3796	GENERAL MOTORS CORP.					Con. Coupe	2605	275	3080	3955	
Sedan, 4d	2636	213	2849	3670	BUICK†					La Sabre					Safari, 6p	2625	276	3101	4315	
Sportman, 2d	2695	217	2912	3625	Sedan, 4d	2386			3805	Sedan, 2d	2485	255	2746		Safari, 9p	2670	284	3209	4390	
Sportman, 4d	2761	222	2983	3700	Sedan, 4d	2367			3724	Sedan, 2d	2545	259	2804		Star Chief					
Convertible	3018	242	3260	3840	Hardtop, 2d	2367			3724	Hardtop, 2d	2568	263	2849		Sport Sedan, 2d	2670	264	2934	3915	
Sta. Wagon, 2s	3066	245	3311	3950	Hardtop, 4d	2446			3796	Hardtop, 4d	2657	268	2925		Sedan, 4d	2736	269	3005	3990	
Sta. Wagon, 3s	3198	255	3453	3980	Sedan, 4d	2499			3845	Est. Wagon, 4d	2847	282	3129		Viata Sed., 4d	2859	276	3138	4040	
Firedome					Hardtop, 2d	2554			3857	Invicta					Bonneville					
Sedan, 4d	2933	236	3169	3840	Hardtop, 4d	2618			3857	Sedan, 2d	2845	289	3125		Sport Coupe	2970	287	3257	3970	
Sportman, 2d	3032	244	3276	3795	Convertible	2771			3909	Hardtop, 2d	2867	288	3125		Viata Sed., 4d	3040	293	3333	4070	
Sportman, 4d	3085	248	3333	3895	Corsair					Convertible, 2d	2847	282	3129		Cov. Coupe	3175	303	3478	4080	
Convertible	3322	266	3588		Hardtop, 2d	3066			4134	Est. Wagon, 4d	3025	295	3320		Cust Safari, 6p	3225	307	3532	4355	
Fireflight					Hardtop, 4d	3139			4235	STUDE-PACKARD CORP.					Sedan, 2d	2932	290	3212	3505	
Sedan, 4d	3415	273	3688	3920	Hardtop, 2d	3242			4236	Sedan, 4d	3048	312	3357		Hardtop, 2d	2979	293	3282	3480	
Sportman, 2d	3478	278	3756	3910	Hardtop, 4d	3316			4311	Hardtop, 4d	3129	316	3447		Sta. Wagon, 4d	3092	292	3384	3560	
Sportman, 4d	3531	282	3813	3950	Convertible	3489			4311	Convertible	3290	330	3620		Hawk	3660	335	3995	4470	
Convertible	3777	300	4077		Sta. Wagons					Est. Wagon, 4d	3495	346	3841		STUDEBAKER					
Sta. Wagon, 2s	3836	305	4141		Roundup, 2d	2630			3761	Electra					Scotman					
Sta. Wagon, 3s	3968	315	4283	4205	Villager, 2d	2683			3827	Hardtop, 2d	3460	356	3816		Sedan, 2d	1631	164	1795	2695	
Adventurer					Villager, 4d, 6p	2736			3900	Sedan, 4d	3495	361	3856		Sedan, 4d	1705	169	1874	2735	
Sedan, 2d	4032	320	4352	3980	Bermuda, 4d, 6p	2722			3853	Hardtop, 4d	3595	368	3963		Sta. Wagon, 4d	1872	183	2055	2865	
Convertible	4331	343	4674		Bermuda, 4d, 9p	2875			3919	Convertible, 2d	3795	387	4192		Champion					
DODGE†					FORD*					CADILLAC†					Commander					

ANNOUNCING...

The New

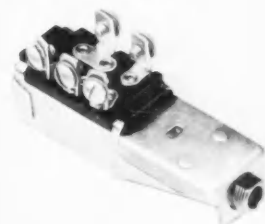
HOLLEY

Line of . . .

Look at these New Holley Profit Makers



VOLTAGE REGULATORS



SWITCHES



GENERATOR PARTS



STARTER PARTS



CARBURETOR REPAIR KITS



CARBURETOR GASKET KITS

STOCK NOW!

NEW- GENUINE HOLLEY VOLTAGE REGULATORS



For the first time, you can stock genuine Holley voltage regulators for all fast moving Ford applications. Long life and trouble-free operation is assured by alloyed contact points and specially designed resistors that increase the life of contact points. Your Holley Distributor is stocked and ready! Call him today.

HOLLEY
Carburetor Co.

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GENUINE HOLLEY VOLTAGE REGULATORS

PART NO.	APPLICATION	DESCRIPTION
HOLLEY PART No. VR-1	1938-55 Ford Pass. 1939-51 Mercury 1939-51 Lincoln 1948-55 Ford Truck	For use with 35 amp generator 6 VOLT
HOLLEY PART No. VR-2	1949-55 Ford Pass. 1947-54 Lincoln 1948-55 Ford Truck 1949-55 Mercury	For use with 40 amp generator 6 VOLT
HOLLEY PART No. VR-3	1956-58 Ford Pass. & Truck 1956-58 Mercury 1956-58 Lincoln	For use with 30 amp generator 12 VOLT
HOLLEY PART No. VR-4	1954-55 Ford Truck	For use with 50 amp generator 6 VOLT

STOCK NOW!

NEW- GENUINE HOLLEY GENERATOR AND STARTER PARTS

For the first time, Holley is offering fast moving generator and starter parts for Ford, Mercury, Edsel and Lincoln applications. These high-profit parts include brushes, bushings, and bearings—all with big volume applications.

Your Holley Distributor is stocked and ready! Call him today.



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GENUINE HOLLEY GENERATOR PARTS

PART NO.	DESCRIPTION	APPLICATION
90R-2	Brush Sets	Ford 1949-58, Mercury 1954-55, Lincoln 1949-56
90R-3	Brush Sets	Ford 1956
90R-4	Brush Sets	Ford 1949-56, Mercury 1956-58, Edsel 1958, Lincoln 1956-58
90R-5	Brush Sets	Ford 1956-58
90R-15	Bearing (Gen. End Plate)	Ford 1929-58, Mercury 1949-58, Edsel 1958, Lincoln 1949-58
90R-16	Bearing (Gen. End Plate)	Ford 1948-58
90R-17	Bearing (Gen. Rear)	Ford 6 cyl. 1951-53, Ford 6-8 cyl. 1954-58
90R-18	Bearing (Gen. Rear)	Ford 1956-58, Mercury 1954-58, Edsel 1958, Lincoln 1954-58
90R-20	Bushing (Rear End Plate)	Ford 6 cyl. 1954-58, Ford 8 cyl. 1949-53, Mercury 1939-53, Lincoln 1938-
90R-41	Brush Sets	Mercury 1958

GENUINE HOLLEY STARTER PARTS

PART NO.	DESCRIPTION	APPLICATION
91R-3	Bushing (Front Plate)	Ford 1932-58, Mercury 1939-58, Edsel 1958, Lincoln 1936-58
91R-4	Brush Sets (Starter)	Ford 1928-58, Mercury 1939-58, Edsel 1958, Lincoln 1936-58

STOCK NOW!

NEW - GENUINE HOLLEY REPAIR AND GASKET KITS for Ford-made Carburetors

For the first time, you can fill out your line of Holley carburetor repair and gasket kits to include fast moving numbers for Ford-made carburetors.

Your Holley Distributor is stocked and ready! Call him today.



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GENUINE HOLLEY REPAIR KITS

PART NO.	DESCRIPTION	ENGINE	USED FOR FORD CARBURETOR NO.
85R-621	Repair Kit	1957 Ford (272 cu. in.) 2 bbl.	B7A-9510 A, X, Q
85R-622	Repair Kit	1957 Ford (272 cu. in.) 2 bbl.	B7A-9510 Z
85R-623	Repair Kit	1957 Ford (292 cu. in.) 2 bbl.	B7A-9510 L, W
85R-625	Repair Kit	1957 Ford (312 cu. in.) 4 bbl.	B7A-9510 B, X
85R-624	Repair Kit	1958 Ford (292, 332 cu. in.) 2 bbl.	B8A-9510 K, L, N, P
85R-626	Repair Kit	1958 Ford (332 cu. in.) 4 bbl.	B8A-9510 A
85R-627	Repair Kit	1958 Ford (352 cu. in.) 4 bbl. 1958 Edsel (361 cu. in.) 4 bbl.	B8A-9510 E

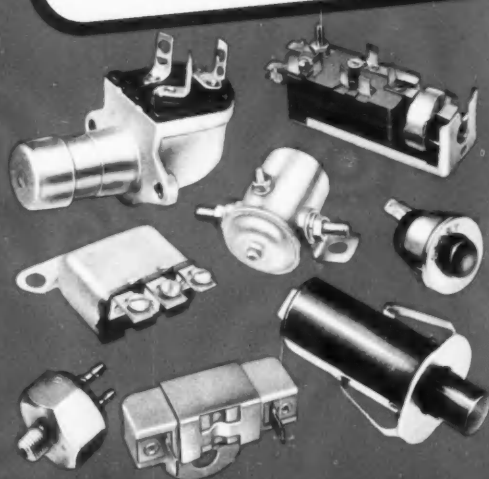
GENUINE HOLLEY GASKET KITS

PART NO.	DESCRIPTION	ENGINE	USED FOR FORD CARBURETOR NO.
85G-628	Gasket Kit	1957 Ford (272, 292 cu. in.) 2 bbl.	B7A-9510 A, L, Q, W, Z
85G-629	Gasket Kit	1958 Ford (292, 332 cu. in.) 2 bbl.	B8A-9510 K, L, N, P
85G-630	Gasket Kit	1957 Ford (312 cu. in.) 4 bbl.	B7A-9510 B, X
85G-631	Gasket Kit	1958 Ford (332, 352 cu. in.) 4 bbl. 1958 Edsel (361 cu. in.) 4 bbl.	B8A-9510 A, E, V



STOCK NOW!

NEW- GENUINE HOLLEY SWITCHES



For the first time, Holley is offering a selection of genuine switches for Ford, Mercury, and Lincoln applications. Part numbers cover all fast moving applications.

Your Holley Distributor is stocked and ready! Call him today.



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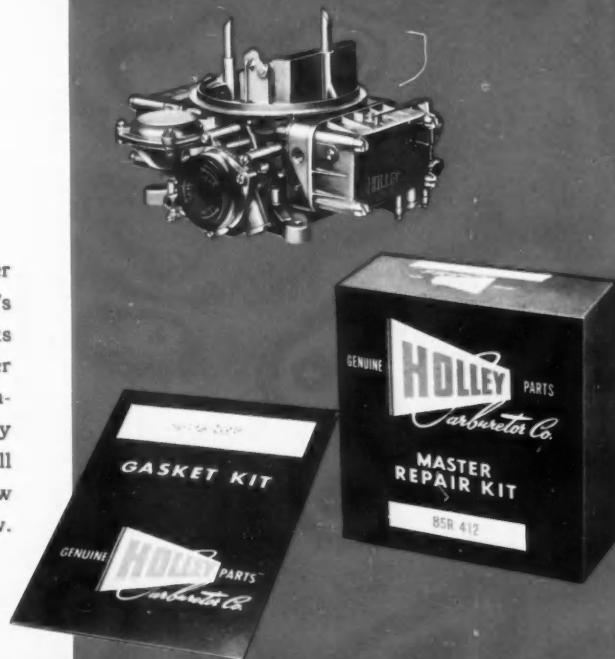
GENUINE HOLLEY SWITCHES

PART NO.	DESCRIPTION	APPLICATION	PART NO.	DESCRIPTION	APPLICATION
89R-25	Dimmer Switch	Ford, Mercury, Lincoln, Continental 1957-58	89R-15	Horn Relay	Ford 1948-55, Mercury 1948-55, Lincoln 1936-55
89R-1	Dimmer Switch	Ford 1938-47, Mercury 1939-47	89R-26	Stoplight Switch	Ford, Mercury, Lincoln 1949-58
89R-2	Dimmer Switch	Ford 1948-56, Mercury 1948-56, Lincoln 1949-56, Continental 1956	89R-18	Headlight Switch	Ford, Mercury, Lincoln 1957-58
89R-4	Headlight Switch	Ford 8 cyl. Pass. 1941-48, Ford 8 cyl. Truck 1941-47, Mercury 1941-48	89R-8	Starter Switch	Mercury 1952-53, Lincoln 1952-55
89R-3	Door Switch	Ford 1950-58, Mercury 1952-58, Lincoln 1952-58, Continental 1956-58	89R-11	Solenoid Switch	Ford 1937-51, Mercury 1939-51, Lincoln 1939-51
89R-5	Headlight Switch	Ford, Mercury, Lincoln, 1950-54	89R-13	Horn Relay	Ford, Mercury 1941-47
89R-16	Door Switch	Ford 1949-50, Mercury 1949-51, Lincoln 1949-51	89R-20	Horn Relay	Ford, Mercury, Lincoln 1956
89R-6	Headlight Switch	Ford 1947-49, Mercury 1949, Lincoln 1949	89R-23	Resistor	Ford, Mercury, Lincoln, T-Bird, Continental 1956-57
89R-17	Headlight Switch	Ford, Mercury, Lincoln 1955	89R-22	Headlight Switch	Ford 1956
89R-7	Starter Switch	Ford Pass. 1937-48, Ford Truck 1937-51, Mercury 1939-48	89R-9	Starter Switch	Ford Truck 1952-55
89R-10	Starter Switch	Mercury, Lincoln 1950-51	89R-12	Solenoid Switch	Ford 1951-55, Mercury 1952-55, Lincoln 1952-55
89R-19	Solenoid Switch	Ford, Mercury, Lincoln 1956-58	89R-14	Horn Relay	Ford Pass. 1948-50, Ford Truck 1948-51
			89R-21	Horn Relay	Ford, Mercury, Lincoln 1957
			89R-24	Resistor	Ford, Mercury, Edsel, Lincoln, T-Bird, Continental 1958

Other Holley Profit Makers . . .

Genuine Holley CARBURETION EQUIPMENT

Thousands of independent repair shops and super service stations have been profiting from Holley's line of complete carburetors, major repair kits and gasket kits. These high profit parts cover popular Ford, Mercury, Edsel, Lincoln and Continental applications. If you are not already stocking Holley Carburetion Equipment, call your nearby Holley Distributor. He has a low cost, fast turnover initial stock available now.



Genuine Holley IGNITION EQUIPMENT

Points, condensers, coils—all fast moving parts for the Ford family are available from your Holley Distributor. You can buy these parts individually or in a low-cost, fast-moving assortment. Both standard and heavy duty models are available for all the high volume applications. Each part is attractively packaged with part number clearly identified. If you are not now earning top profits in the sale of Holley Ignition Equipment, be sure and call your Holley Distributor today.



the **COMPLETE LINE** of Carburetion and Ignition Equipment.



For more than half-a-century—
original equipment manufacturers
for the automotive industry.

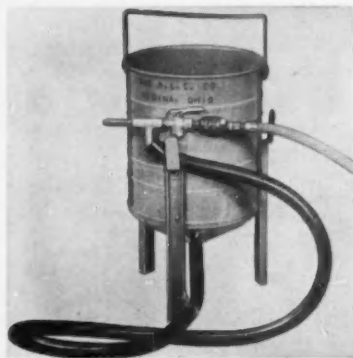
11955 E. NINE MILE ROAD

WARREN, MICHIGAN

New Products . . .

Continued from page 87

more or less of the powder. This also controls the consistency of the mix. In addition, the manufacturer states that FILLERite is non-toxic and contains no Fiberglass dust.



342. Sand Blaster

A. L. C. Company: A spot sand blaster which will operate from the average garage compressor has been introduced. Known as the "Sandy Jet," it is lightweight and portable. It is reported that it can be used with almost any type of abrasive or liquid detergent. The Sandy Jet Blaster will remove rust, paint, carbon, dirt, etc. in hard-to-get-at places. Nozzles are heat treated to give maximum wear.

Backward Look . .

Continued from page 59

Based on the interest and orders to date, the manufacturer says it plans to produce about 2000 MERRY OLDS in the next 12 months. The market? Individuals wanting a second car. Like where the father could drive it and tinker with it on weekends. And the mother could use it for trips to the store, or the teenager could drive it to school. Another source of buyers would be businessmen desiring a promotion vehicle. For nailing down identity in a community, the car is an excellent means.

Customers Like Car Price Tag

The manufacturer's price tag on 1959 automobiles has eliminated the "guessing game" as to the cost of a new car. It is also helping to restore customer confidence, so reports the Executive Committee of the NADA.

The Executive Committee stated that public acceptance of the federal price label legislation

has been universally favorable.

"Representatives of NADA strongly endorsed the Automobile Information Disclosure Act during hearings on the proposal," Dean Chaffin, president of the Association said.

"The manufacturer's suggested retail price affixed to the new cars removes any doubt on the part of the customer as to the price of the vehicle. It also convinces the buyer that the price is not 'packed'."

INLAND Announces a **NEW** 1-PIECE RADIATOR SHOP



Now, radiator servicing can give you worth-while profits. For Inland has developed the first complete 1-Piece Radiator Shop!

COSTS LESS TO BUY It gives you a complete radiator department—everything you need to do the entire job—TEST, CLEAN and REPAIR radiators.

COSTS LESS TO OPERATE You don't need a full time operator. One of your present employees (our free factory school teaches him everything) in only a part of his time will produce a nice additional profit with no increase in overhead.

TAKES LITTLE ROOM Complete unit requires only 11' 7" of wall space. Yet,

it is large enough to handle all car radiators and many truck and tractor radiators.

COMPLETE SHOP Does everything! Servicing radiators with the Inland Radiator Shop is easy—the unit combines the Flo-Test Machine, Hot Cleaning Vat and Test & Repair Bench—all in compact space.

RADIATOR SERVICING IS PROFITABLE Market is growing! Motor Service survey shows that in 1957 there was an INCREASE OF 15.8% IN RADIATOR REPAIR JOBS! This was one of the few large increases in the 1957 service job analysis!

WRITE for Free 48-Page Book

showing equipment, prices, training course, "Pays-For-Itself" purchase plan and experiences of other operators.

INLAND MFG. CO.

1108 Jackson Street
Dept. MA-11, Omaha 2, Nebr.
World's Largest Manufacturer of
Radiator Servicing Equipment

INLAND MFG. CO., Dept. MA-11, 1108 Jackson St., Omaha 2, Nebr.
Please send free 48-pg. book describing new 1-Piece Radiator Shop, training school, prices, etc.

NAME _____ (PLEASE PRINT)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

BY _____ TITLE _____

If dealer, make of car sold _____

Are you now operating a radiator Dept.? ☐ Yes ☐ No



B&D Polisher accessories are profit makers



BONNETS & PADS

Every job goes faster when you use the right tool... and the accessories built for that tool.

Start with a Black & Decker Heavy-Duty Polisher then add a genuine Vitri-Buff Bonnet—slips on in a twink—gives your customer's car the new-car look that puts a gleam in his eye—profits in your pocket.



POLISHING WAX



POLISHOP CART

For rubbing down "orange peel" in lacquer finishes use a B&D Pile Fabric or Felt Rubbing Pad—designed for the job.

Put 'em all together in your Polishop and you're completely equipped for Polishing Profits. See your Jobber—he's stocked with a complete B&D Accessory line to give you real service!

INSIST ON THE BEST

Black & Decker

ACCESSORIES DESIGNED FOR THE TOOL

Circle 381 on Inquiry Card, page 71

New Studebaker Trucks . Continued from page 54

the V-8.

The Scotsman for 1959 is rated at a gross vehicle weight of 5,000 pounds. Single-stage rear springs are standard. Heavy-duty, two-stage rear springs are optional. Other options include Twin Traction, which transmits power to the rear wheel with the greatest traction.

The Transtar half-ton deluxe is offered in a 112 or 122-inch wheelbase. Both have a gross vehicle weight of 5,200 pounds.

The 112-inch wheelbase type has a 6½-foot pickup body and the 122-inch is available in either an eight-foot pickup or stake body.

The 289-cubic-inch V-8 gives 225 horsepower at 4,500 rpm., with a four-barrel carburetor. A three-speed transmission is standard. A four-speed synchromesh transmission, over-drive and automatic transmission are optional.

Two-stage springs are standard equipment. Heavy-duty, two-stage springs are optional. Standard tires are 7.10 x 15 and 6.50 x 16 are optional.

Standard cab equipment includes a crash pad, ash tray, dual electric windshield wipers, full foam seat cushions, sliding, adjustable seat and deluxe color-matched upholstery and interior trim. Among options are a heavy-duty engine, four-barrel carburetor, heavy-duty battery and radiator, booster brakes and Twin Traction.

Nine solid and eight two-tone colors are available.

The Transtar three-quarter-ton Deluxe has a 122-inch wheelbase and a gross vehicle weight of 7,000 pounds. An eight-foot pickup, platform or stake body is available.

The 289-cubic-inch Power Star V-8 is the same as on the Transtar half-ton Deluxe. Standard and optional transmissions are

also the same.

The three-quarter-ton frame, like all Transtar frames, is custom designed for individual models. High section modulus of channel-type side rails provides extra strength, as do heavy box-section cross members and heavy K-member reinforcements.

Cross-link, variable ratio steering is designed for easier handling, on or off the road. Wheel jarring forces cancel out to leave full control in the driver's hands.



Main leaves on the two-stage rear springs give easy action when the load is light. The second-stage utilizes all the leaves when the vehicle is under full-load capacity. Heavy-duty springs also are optional on the three-quarter-ton.

The Transtar two-ton, heavy-duty trucks have a gross vehicle weight of 19,000 pounds. Wheelbases are 131, 155, 171, 195 and 212 inches. Platform or stake bodies are nine feet long in the 131-inch, 12 feet in the 155 and 14 feet in the 171. Stake bodies are 88¼ inches wide and platform bodies 93⅝ inches. The 131-inch wheelbase is used primarily for tractor operation or dump truck use.



Every season is open season for polishing job profits!

B&D Automatic Polisher earns
as much as \$10.50 an hour on an
investment as low as \$9.60 a month

You can make year-round polishing job profits
with a B&D Automatic Polisher and Vitri-Glaze!
That's what thousands of dealers across the nation
are discovering as they make as much as \$13.00 a
car while buying their *PoliShop*.

"I get 'em in the Spring when the rains come; in
the Summer to protect their cars against the hot
sun; in the Fall to freshen 'em up, and in the Winter
to keep snow and salt from spoiling the finish.
Polishing is really a year around profit maker!"

See for yourself. Mail coupon today for a free
demonstration or additional information. THE
BLACK & DECKER MFG. CO., Dept. 5111, Towson 4,
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Prove Profits for Yourself!

	Polishing by Hand	With B&D Polisher & New Vitri-Glaze
Time to do the job	3 3/4 hours	1 1/4 hours
Labor @ \$1.50 per hour	\$ 5.63	\$ 1.88
Price you charge	\$15.00	\$15.00
Profit to you	\$ 9.37	\$13.12
Hourly Profit	\$ 2.49	\$10.50
EXTRA PROFIT per hour		
for YOU with B&D Polisher & Vitri-Glaze		\$ 6.01



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☐ Send me further information.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

New Edsel Continued from page 52

the new Edsels have high lift camshafts for improved low speed torque. Hydraulic valve lifters are standard on the 332 and 361 cu. in. V-8's. Carburetors have been redesigned for better operation and easier servicing.

A choice of three transmissions is offered this year: The economy Mile-O-Matic which

features aluminum in its construction, weighing 50 lb. less than the conventional automatic transmission. A three-speed synchromesh transmission; and the dual-range automatic transmission.

Numerous mechanical changes have been incorporated in the 1959 line. The chassis frame is of ladder type, designed for

maximum strength and rigidity. For convertibles, the frame adds a heavy X-member of I-beam section. At the body shell section the frame is widened. Purpose: to follow the outer contour of rocker panels. This provides for maximum space within the passenger compartment.

Front suspension is of short-long arm design. Leading edge is tilted 3-deg. upward. The lower arm is swept back 20-deg. to allow for proper wheel precession.

Shock absorbers are of restricted type, installed within the coil spring. Lower suspension arms are mounted in rubber bushings. Upper suspension arms are mounted to the top of the frame on permanently lubricated threaded bushings that have no ride build-up.

Resin Welding

Continued from page 63

adhesives as improved substitutes for rivets in the assembly of wing sections. What the engineers at Lee have done, is put these resins to work in a continuous conveyorized mass production process, using both pressure and heat. The production equipment used in manufacturing the resinweld unit enables Lee to market a visibly superior product at a price no higher than ordinary filters.

Lee first started to manufacture automotive products in 1933. In those days, Eli Lilly, the pharmaceutical firm, used to make a veterinarian's capsule. Lee conceived the idea of filling these capsules with radiator stop leak. The hot water in the cooling system dissolved the gelatin capsule, and circulated the contents, which stopped the leak.

Subsequently, the company manufactured such diverse products as oil additives and detergents, tools, cables, and stampings of various kinds.

makes handling any transmission just a one-man operation



Specially designed for removing and replacing

- ★ Truck Transmissions
- ★ Torque Converters
- ★ Truck Differentials
- ★ Passenger Car Transmissions

WEAVER HYDRAULIC TRANSMISSION JACK

You can save time and money with this one-man operated transmission jack. The Model WA-87 (capacity 2,000 lbs.) is ideal for removing and replacing truck transmissions, torque converters, truck differentials and passenger car transmissions. Low silhouette, high lift and large caster wheels make the WA-87 particularly useful for shops not using hydraulic lifts for transmission removal.

This is not a mechanical jack but is a HYDRAULIC jack powered by a Weaver 8 ton Hydraulic Power Unit. The WA-87 has a saddle side tilt of 11° each way. Saddle front tilt is 22° and backward tilt is 14°. Jack is regularly furnished with standard adapter to handle truck transmissions and



Illustrated at left is a heavy truck transmission supported on adjustable bolts in moveable adapter brackets. Transmission is held securely by two strong chains fastened to adapter brackets. This adapter is furnished with the WA-87 Jack.



Shown at left is a heavy truck differential supported on the removable Truck Differential adapter. This adapter (WA-88) simplifies removing and replacing heavy truck differentials and is available on special order.

torque converters. Special adapter available for truck differentials and passenger car automatic transmissions. For complete details write for Bulletin MA-830.

WEAVER

WEAVER MANUFACTURING CO., SPRINGFIELD, ILL., U.S.A.

SERVICE SHOP EQUIPMENT

Complete line includes: Train Post Lifts . . . Triple Post Lifts . . . Single Post Ball-On-Fram-Wheel and Frame Type Lifts . . . Unit Lifts . . . Bumper Lifts . . . Car Washers . . . Wheel Alignment Equipment . . . Headlight Testers . . . Brake Testers . . . Wheel Balancing Equipment . . . Jacks . . . Wheel Balancers . . . Air Compressors.

**WHY AMERICA'S NUMBER ONE
ORIGINAL EQUIPMENT CARBURETOR
IS YOUR BEST BET
FOR BETTER BUSINESS!**



Rochester-GM Carburetors Give You—

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GREATER MARKET! Every other car passing your door is a potential customer. Original equipment on over 22 million cars, Rochester-GM Carburetors are specified on more top-quality new cars and trucks than any other carburetor.

2

EASE OF SERVICE! Fewer parts mean quicker, surer service. Complete training and service aids mean greater skill and profits for you.

3

ADJUSTMENTS THAT HOLD! Rochester-GM Carburetors *stay* serviced, assure satisfied customers. Order Rochester-GM Carburetors, parts and kits from your nearby UMS distributor today!

Rochester Products Division of General Motors, Rochester, New York



**America's
number one
original equipment
carburetors**

ROCHESTER CARBURETORS

"Bendix Research on Cleaning Techniques Pays Off for Me"



"I've found I can save time and money by using all three Bendix cleaners. Speedclene*, Metalclene*, and Econoclene* are made for specific cleaning applications. By using the proper Bendix cleaner, you cut labor costs . . . use less cleaner . . . do a faster and better job."

SPEEDCLEN—a super-fast, premium parts cleaner which combines positive cleaning action with a pleasant odor.

METALCLEN—a cold-immersion cleaner which removes dirt, grease, and gum from metal parts.

ECONOCLEN—a multipurpose cleaner concentrate which can be diluted and mixed in varying proportions for economical cleaning. *REG. U.S. PAT. OFF.

BENDIX PRODUCTS DIVISION **SOUTH BEND, IND.**



NADA Discusses Convention Plans

Executives of the National Automobile Dealers Association and representatives of car manufacturers and suppliers of automotive equipment and accessories met at Detroit recently. Reason? To review plans for the forthcoming NADA Convention and Equipment Exhibition.

The new car dealer meeting, NADA's 42nd Annual Convention, is scheduled for January 31st through February 4th, 1959. The theme of the Convention is: "A PROFITABLE Industry Serves America."

The Equipment Exhibition has been a highlight of the automotive convocation. It provides new car dealers and their service personnel opportunity to see latest developments in automotive products.

Plans for the 1959 Exhibition call for use of all available space

in Chicago's Conrad Hilton Hotel's large Exhibition Hall. Here exhibits of many of the nation's leading automotive equipment manufacturers will be housed. The highly successful "Service Consultation Hall," which was first introduced in San Francisco in 1957, will again be featured. Top service officials of all car manufacturers will be on hand. To counsel with dealers in areas of service and management.



Blue Bird's had a baby!



the new
wire brush
battery

**TERMINAL CLAMP
and POST CLEANER**

makes battery service easier, more efficient

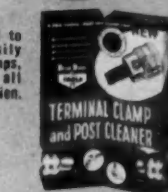
- REMOVES ALL CORROSION FROM BATTERY POST AND TERMINAL CLAMPS
- INSURES PERFECT CONTACT
- FITS IN YOUR POCKET
- STEEL CASE with EASY-GRIP KNURLING



Metal brush, shaped to fit snugly but easily inside terminal clamps, quickly removes all corrosion.



Special donut-shaped metal brush in base fits over battery post for quick cleaning.



Look for this handy DISPENSER - DISPLAY at your parts jobber!



Bergman TOOL Manufacturing Co., Inc.
1573 Niagara Street • Buffalo 13, N. Y.

MANUFACTURING FINE QUALITY TOOLS FOR 60 YEARS

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF CHILTON'S MOTOR AGE, published monthly at Philadelphia 39, Pa., for October, 1958.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Russell W. Case, Jr., Ridley Creek Road, Media, Pa. Editor, Frank P. Tighe, 1017 Drexel Avenue, Drexel Hill, Pa. Managing Editor, William H. Wolfe, 517 Bradford Road, Oreland, Pa. Business Manager, Russell W. Case, Jr., Ridley Creek Road, Media, Pa.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.) Chilton Company, Chestnut and 56th Sts., Philadelphia 39, Pa.

Holders of more than 1 per cent of the capital stock outstanding of Chilton Company: Mary M. Acton, 260 Sycamore Avenue, Merion Station, Pa.; George C. Busby, 2 East Sunset Avenue, Chestnut Hill, Pa.; Mrs. Beulah Fahrendorf, Chateau LaFayette, Scarsdale, New York; Dorothy S. Johnson, Route 1, Putnam Valley, New York; Kimberton Hills Farms, Inc., 1608 Walnut Street, Philadelphia, Pa.; Mabel P. Myrin, 1608 Walnut Street, Philadelphia, Pa.; Mary M. Acton and John Blair Moffett, Trustees U/W of Clarence A. Musselman, Deceased, 1608 Walnut Street, Philadelphia, Pa.; Beneficiaries: Mary M. Acton and David Acton; J. Howard Pew, 1608 Walnut Street, Philadelphia, Pa.; J. N. Pew, Jr., 1608 Walnut Street, Philadelphia, Pa.; Mary Ethel Pew, 1608 Walnut Street, Philadelphia, Pa.; Alberta C. Sly, 149-40 35th Avenue, Flushing, New York; Alberta C. Sly, Executrix U/W of Frederick S. Sly, Deceased, 149-40 35th Avenue, Flushing, N. Y.; Beneficiaries: Albert C. Sly, Alberta C. Sly, and John E. Sly; Soleil Farms, Inc., 1608 Walnut Street, Philadelphia, Pa.; Charlotte M. Terhune, 160 E. 48th Street, New York, New York.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

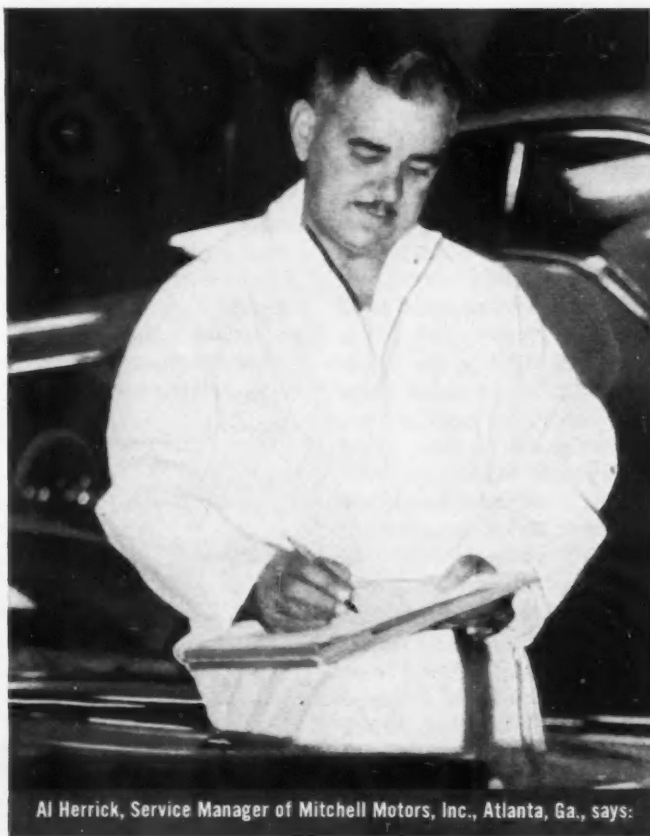
FRANK P. TIGHE
Editor

Sworn to and subscribed before me this 16th day of September, 1958

PHILIP J. SHIRE, JR.

(My commission expires January 7, 1959)

[SEAL]



Al Herrick, Service Manager of Mitchell Motors, Inc., Atlanta, Ga., says:

"Our Yellow Pages advertising helps sell cars and service."

"The service end of our business is mighty important. That's why we're so happy with the results of our Yellow Pages advertising. For the Classified Directory helps direct a steady flow of new car and service business to our door!"

When automobile owners—especially newcomers to a community—are looking for dependable car service—the first place they look is in the Yellow Pages. If your advertising and listings are under appropriate classifications, there's a better chance that you'll get their business. Ask your Yellow Pages man about an effective program to fit your needs. Call him at your local telephone business office today!

"THE YELLOW PAGES are a big business-getter for our new car, used car and service departments," says Mr. Al Herrick. This 1/4-page ad (shown reduced) plus listings under automotive classifications and manufacturers' trade-marks bring in the prospects!

Safer Lighting Continued from page 58

New developments in mechanical aiming devices, along with the aiming pads on sealed beam units, make the job of aiming headlights relatively simple. The operation takes little more floor space than the vehicle itself. The cost of these mechanical aiming devices is quite low.

Inadequate lighting is the result of overdriving of headlamps in many cases. But this, in turn, is often caused by operating with blackened bulbs. Or with dirty reflectors; water inside the lamps; use of lights designed for lower speeds and less traffic of ten years ago.

Mis-aiming itself is the cause of many a poor lighting condition. Many times drivers cannot see pedestrians simply because their headlights are not aimed properly. Drivers must be told that headlamps are subject to road shock and vibration just like any other assembly on the car. Continual jarring can affect headlamp positioning. The light may be directed too high, too low. Too far to the side or a combination of any of these. Under these circumstances the light thrown on the road ahead of the driver where he needs it can be cut in half. Engineers tell us that the mis-aim of headlamps by only one half of one degree will cut the beam candle-power ahead to about 30,000 candle-power. Or approximately half of the 65,000 beam candle-power required at high driving speeds.

This is a story that must be told again and again to the drivers. Many do not even realize that the sealed beam units require adjustment as did the older type lamps. Even new cars cannot always be relied upon to have properly aimed headlamps.

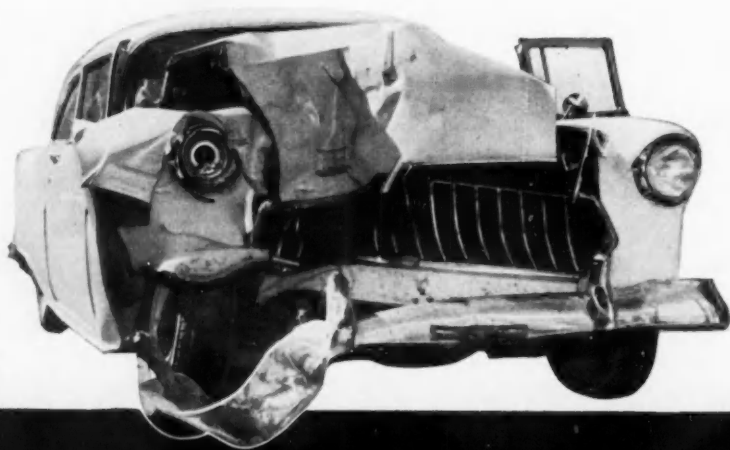
Let us take a look at this night perception in terms of some of the speeds we operate. The vehi-

cle owner who comes into the service shop for safety checks generally recognizes that a safe vehicle must stop with good brakes. Yet the car must also start with adequate lights. Speeds cut perception distances at night. We need every candle-power built into them.

For example, if we are driving at 20 miles per hour, most of us

can see a man in a dark suit 300 feet ahead. At 40 mph we can see him only when he is 260 ft. ahead. But at 60 mph we can probably see him only when he is 220 ft. in front.

An average driver, in a car with good brakes, traveling at 40 mph will travel 149 ft. between the time he recognizes danger and the time he brings his car to a stop. At 60 mph he will travel 366 ft. He's 66 ft. short—and he hits the hypothet-



Make sure YOUR customers have . . .

● **WORLD BESTOS "PF" (Prescribed Friction)** brake lining helps build your reputation as a brake specialist . . . it's the *safest, most dependable* lining you can put on any car.

here's why . . .

WORLD BESTOS "PF" dry-mix brake lining sets are made up from 7 different friction formulas . . . to give you *exactly the Right Combination* of friction qualities you need for every car that comes into your shop. *Prescribed Friction* sets give your customers longer lining life, positive fade control, quick recovery and *Safe Stopping Power* for today's hazardous driving conditions.

Get full details and prices—Call your World Bestos Distributor

WORLD

ical pedestrian 300 ft. ahead. And this is under ideal road conditions!

But what happens to our seeing ability when we see the headlamps of an oncoming vehicle? Glare from the approaching vehicle can reduce visibility as much as 80 per cent. In other words, instead of seeing the pedestrian at 300 ft., we might not see him until he is only fifty feet away. All this because of poor lighting. Or because of improper

aiming of headlamps.

The service shop is the place where these lives can be saved. It will require an education program that only experts in this field can convey to these drivers.

One of the newer developments in lamps is what is termed a "built in spotlight" in the lower beam.

Designed for the cars which do not have the four light system, it provides for better seeing in rain, snow and fog. It

does so by giving the driver more light farther down the right side of the road. This directed beam on the lower beam side permits him to "see through" the light shining in his eyes from oncoming headlamps.

Even if the oncoming car fails to dim, or if its headlamps are aimed too high, this directed beam is said to reduce the effect of glare. By providing for better visibility. Another feature of this lamp is the fact that drivers' eyes more quickly readjust to the lowered brightness after passing the car. Because of the better illumination from the lower beam. This new headlamp is interchangeable with all lamps used in the two-headlight systems; is available in both 6 and 12 volt.

Any headlamp system, however, is only as good as it is aimed. Accuracy is important in this operation. An error of just half a degree will result in a mis-aim of 5 feet at a distance of 600 ft. ahead of the vehicle.

STOPPING POWER

Save Shop Time—WORLD BESTOS Bonded Brake Shoe Sets save installation time—help you build service volume.

"PF" bonded brake shoes are available in clearly labeled, packaged, 4-piece, single axle sets for all passenger cars.

"PF" Segments also are packaged in 4-piece, single axle sets for riveting or bonding.



or write direct to WORLD BESTOS, NEW CASTLE, INDIANA

BESTOS



Methods of locating the target points for aiming are available to any service center. Most have this information and are adequately prepared and informed on proper procedures. The problem becomes one of educating
(Continued on page 104)

Safer Lighting Continued from page 103

the driver on the importance of proper aim. Then sell the job while he is in for service.

Most service specialists are generally familiar with all phases of headlight aiming. Many are remiss, however, in telling this story to their customers. Many have not developed the habit of checking headlamps on the cars that come in

for service. It has been the opinion of many people that a car equipped with sealed beam headlamps is generally safe for night driving.

The facts, however, are evident with a simple check under any traffic situation. Too many cars operate with poor lighting. Some sealed beam units become dim in time just like any in-

candescent lamp. Road jars, bumps obtained in parking, and loosening of adjustments will throw the lamps out of aim.

When you see dark, fogged up lenses, you can be sure that the driver is a night hazard. When he learns this, he will be a customer. Nine out of ten cars that come into a repair shop are in need of some type of lighting service. Good lighting is your business. Sell a lamp and save a life!

PROTECT your valve jobs

USE THE FINEST
motor oil available to help preserve the effectiveness of your repair jobs . . . to keep valves clean and free-acting, and to keep cams and valve lifters protected against corrosive wear.

always lubricate with PENNZOIL

Customer satisfaction—for keeps!

Pennzoil motor oils are refined from 100% Pennsylvania crude and blended with Z-7, the exclusive ingredient that stays active. These oils stay *tough* in spite of engine heat and pressure, provide control over acids and other deposits, keep *all* moving parts free of excessive wear—for keeps. They're a sure way to customer satisfaction—to *more* profitable service business!

2 GREAT MOTOR OILS!

Now . . . Pennzoil 10W-30 with Z-7, world's only *oil-rich* multiple-viscosity oil; and famous Pennzoil with Z-7, available in all correct service grades.



Cash in on Pennzoil acceptance! Call your nearest Pennzoil distributor now, or write Pennzoil, Box 78, Oil City, Pa.

Member Penn. Grade Crude Oil Assn., Permit No. 2.

Jaycee Road-E-O Prizes Awarded

A 17-year-old Maryland youth, Edward Meade Smith was named as the Champion Teen-Age Driver of United States. In addition he also won a \$2000 college scholarship. He is winner of the 7th annual National Teen-Age Safe Driver Road-E-O. Competition was conducted by the U.S. Junior Chamber of Commerce.

Smith scored 905 points out of a possible 1000 in the stiff competition. The 51 contestants represented all 49 states, Hawaii and the District of Columbia. Contestants were tested on all phases of their ability to handle a car; their attitude towards safe driving and safety on the highway.

Second place winner was Marvin Lowry of Georgia, who scored 821 points. He won a \$1500 college scholarship. Third place and a \$1000 college scholarship went to Donald C. Weeks of Maine.

The awards were made at a Hotel Willard banquet in Washington, D.C. It was attended by the contestants, their families, and high ranking officials of the U.S. Jaycees. Also the sponsoring companies: Liberty Mutual Insurance Company, Chrysler Corporation, American Trucking Associations, Inc. and the Pure Oil Co.

three new

Herbrand

"TUNE-UP" METERS for 10 vital tests

Every garage and service station will want these easy-to-use, easy-to-read meters! Guaranteed for amazing accuracy, these compact, modern units are real profit makers in the busy shop—actually eliminate 10 old time-consuming methods of testing.



**HT-100
VOLT-METER**

Exceptionally low in cost. No dials to set and just 2 leads to connect! Measures voltage of batteries, generators and voltage regulators—tests batteries, cables and wiring. For use on all 6 and 12 volt cars. **Only \$19.95**

HT-212 UNIVERSAL TACHOMETER

In the popular price range. A remarkable engineering feat! Measures speeds up to 9000 RPM's on automobiles, outboard motors, lawn mowers, stationary engines, marine engines, chain saws and tractors—without any direct connections! **Only \$72.50**



HT-346 TACHOMETER

Economically priced. For all battery ignition systems. Using one ordinary flashlight cell, it checks idle speed adjustments, automatic transmissions and carburetors on all 6 to 24 volt systems. Only 2 simple connections. **Only \$37.95**

ASK YOUR JOBBER, OR WRITE FOR NEW EQUIPMENT CATALOG EC-101

Herbrand Equipment
HERBRAND DIVISION
THE BINGHAM-HERBRAND CORPORATION
FREMONT, OHIO

Circle 383 on Inquiry Card, page 71

Brady's Garage

Continued from page 47

to end the car owners annoyance. And the car owner must be conscious of this annoyance."

Brake work, according to Brady, can be sold with a safety sales pitch. But not shocks. Neither can they be sold successfully with a comfort riding sales pitch.

"The car owner must be aware that he needs shocks . . . but doesn't know that it's shocks that he needs to end his driving problem," Brady concluded.

Brady contends that fully 25 per cent of his customers need new shocks and to be able to guarantee his alignment work, he has no choice but to sell shocks. Since adopting this practice his come-backs have been reduced to a minus zero.

Studebaker Lark

Continued from page 53

is its distinctive grille. This is flanked by combination parking-directional lights and air scoops.

The 1959 Studebakers are available with either a new six-cylinder or V-8 powerplant. Also with either Flightomatic, overdrive, or conventional transmission. Both new engines are designed to operate efficiently on regular gasoline.

The new 169.6 cu. in. engine is an L-head six. It has an improved combustion chamber design, a higher compression ratio.

For those desiring V-8 performance, Studebaker offers an improved, short-stroke, 259.2 cu. in. engine.

Among other major engineering features is a softer, smoother ride resulting primarily from Studebaker's improved variable-rate front coil spring design. These variable-rate springs automatically compensate for variations in load and road conditions.

Circle 384 on Inquiry Card, page 71—

IT'S A FACT!

JUST 1

Cordomatic®

**DROP LIGHT
REEL**



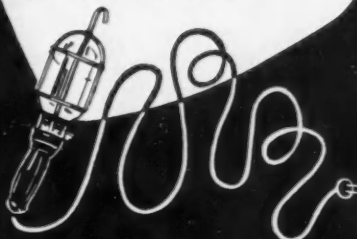
No Junction Boxes
Required. Mounts
Easily on Wall or
Ceiling.



OUTLASTS

12

**OLD FASHIONED
DROP CORDS!**



**... And Gives You Years of Increased
Economy, Convenience and Safety, Too!**

Cordomatic not only costs less than any other shop light in the long run, it saves you time and money on every job! Cordomatic reels in and out automatically . . . can't cause accidents like ordinary drop cords. Once you try a Cordomatic, you'll never go back to dangling, tangling drop cords again!

See your jobber for a demonstration,
or write for free illustrated brochure to:

Cordomatic®

Dept. A • 17th and INDIANA AVE.
PHILADELPHIA 32, PA.

Calendar of Coming Events

General

Nov. 22-29 excluding Sunday, Nov. 23 The Automobile Show, Grand Exhibition Hall of the Trade and Convention Center at 34th Street and Convention Ave., Philadelphia, Pa.
Jan. 17-25—1959 Chicago Automobile Show, International Amphitheatre.
Feb. 2-4—Automotive Accessories Manufacturers of America exposition, New York Coliseum, New York City.
Feb. 15-16—Automotive Affiliated Representatives officers meeting, Pick-Congress Hotel, Chicago.
Feb. 15-17—National Standard Parts Assn. national convention, Sherman Hotel, Chicago.
Feb. 15-17—Motor and Equipment Wholesalers Assn. National Convention, Conrad Hilton Hotel, Chicago, Ill.
Feb. 16—Automotive Booster Clubs International board of governors meeting, Conrad Hilton Hotel, Chicago.
Feb. 17—Automotive Affiliated Representatives board of directors and membership meeting, Pick-Congress Hotel, Chicago.
Feb. 18—Automotive Booster Clubs International banquet, Conrad Hilton Hotel, Chicago.
Feb. 18-21—International Automotive Service Industries Show, Navy Pier, Chicago.
Feb. 26-27—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, Sheraton-Cadillac Hotel, Detroit.

Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach, Florida.
March 12-15—Pacific Automotive Show, San Francisco Civic Auditorium, San Francisco.
May 3-8—Top Management Institute, Motor and Equipment Wholesalers Assn. Allerton House, University of Illinois, Monticello, Ill.
May 4-6—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, San Marcos Hotel, Chandler, Ariz.
May 17-20—Automotive Engine Builders Assn. convention, Royal York Hotel, Toronto, Ontario.
May 27-29—American Petroleum Institute, Div. of Marketing, midyear meeting, The Savery, Des Moines.

Dealers Convention

Nov. 8-10—Texas Independent Automobile Dealers Assn., Texas Hotel, Fort Worth.
Nov. 16-18—Mississippi Automobile Dealers Assn., Buena Vista Hotel, Biloxi.
Dec. 3—Utah Automobile Dealers Assn., Newhouse Hotel, Salt Lake City.
Dec. 9—Milwaukee County Automobile Dealers Assn., Milwaukee Athletic Club, Milwaukee.
Jan. 31-Feb. 4—National Automobile Dealers Assn., Chicago.

Porta Elected S-P Vice Pres.

A. J. Porta has been elected executive vice-president by the board of directors of Studebaker-Packard Corporation. Harold E. Churchill, president, made the recent announcement.

Porta has been financial vice-president of the corporation since early in 1956. A native of Fort Smith, Arkansas, Porta joined the accounting department of Studebaker Corporation in 1925 following graduation from Notre Dame. He progressed through various divisions of this department before being appointed comptroller of the Studebaker Pacific Corporation, Los Angeles. This in 1939.

He is a member of the American Institute of Accountants, the Controllers Institute of America and is a Certified Public Accountant. He has been active in South Bend civic affairs.



2 NEW CHAMPION Quality Products



SPRAYON GREAS-OFF

Greas-Off is a general purpose degreaser that floats away dirt and grime in minutes. Simply spray it on, then wash away with water. Non-toxic, non-corrosive, non-staining. Can be used on upholstery and fabrics as well as on tools, machinery, electrical equipment, engines and parts. Available in giant 16 ounce cans.



SPRAYON GRAY PRIMER NO. 4416

Neutral primer for all lacquer and enamel undercoating. Superior bonding and spreading capacity. Cuts labor, saves time, easy to apply. Available in giant 16 ounce cans.

DISTRIBUTORS ATTENTION:
Some territories open.



CHAMPION BRONZE POWDER & PAINT CO., INC.

DEPT. MOTO
2101-21 N. ELSTON AVE.

CHICAGO 14, ILL.



Buy Bonds



Gabriel

SHOCK ABSORBERS

**THE GABRIEL COMPANY
CLEVELAND 15, OHIO**

HAVILAND



MUFFLERS

WITH "INSTANT HEAT DISTRIBUTION" TO
REDUCE CONDENSATION FOR LONGER WEAR.
"THERMO FLO" Reg. U.S. Pat. Off.

ARNOLD HAVILAND COMPANY • Defiance, Ohio



*New advances by
R.L. Polk & Co. mean
even greater advertising results*

Once more R. L. Polk & Co. leads the way in further increasing the effectiveness of mail advertising . . . a medium already *proved* the most selective, best read, best remembered and most persuasive.

With one of the nation's largest data-processing installations, R. L. Polk & Co. can now select . . . electronically and automatically . . . specific individuals or groups that comprise your prime market. Selection is made from the 60 million families who are America's most active buyers.

Other new electronic equipment, much of it designed and perfected by Polk's own

engineers, permits accurate, high-speed addressing, handling and mailing of your advertising messages.

These developments further underscore R. L. Polk & Co. leadership in mail advertising. This leadership has been maintained by such Polk accomplishments as the client-agency-publisher concept of mail advertising . . . the most comprehensive research of the medium . . . the performance of custom, high-volume work for many of the nation's leading advertisers.

This know-how is at your direction—to make your 1959 merchandising more productive.

R·L·POLK & CO.

p u b l i s h e r s

431 Howard Street • Detroit 31, Michigan



CHICAGO • CLEVELAND • NEW YORK • PHILADELPHIA • ST. LOUIS • TRENTON

Chilton's MOTOR AGE, NOVEMBER, 1958



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This Advertisers' Index is published as a convenience, and not as part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

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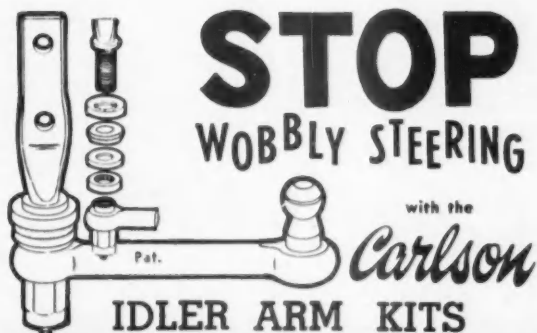
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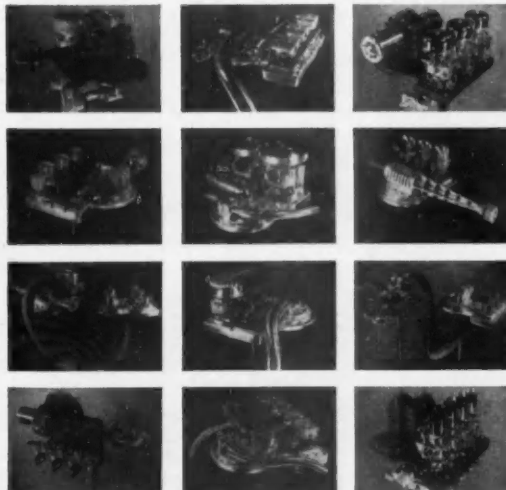
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Student: "My, but you look tired."
Another student: "Yeah, I sure am. It's these hours I'm keeping. Take this morning, for example. I took my girl to a lecture at 2 a.m."
"Two a.m.?"
"Yeah, her father was waiting up for us."

"I can't get away on a vacation this year."
"Oh, well, you can get the same effect by staying home and tipping every third person you meet."

Boss (to newly employed): "You've been with us a week now and so far we haven't been able to find anything you can do; yet when we hired you, you said you were a handy man."
New man: "That's right, sir. I am a handy man. I live right around the corner."



"Henry," puffed the fat woman plaintively as her husband failed to assist her onto the street car, "you are not as gallant as when I was a gal."
"I know, dear," puffed Henry, "but you aren't as buoyant as when I was a boy."

Census Taker (to woman at door): "How many in your family?"
Woman: "Five. Me, the old man, the kid, the cow and the cat."
Census Taker: "And the politics of your family?"
Woman: "Mixed, I'm a Republican, the old man's a Democrat, the kid's wet, the cow's dry and the cat's on the fence."

"Remember the Thompson brothers? The handsome clever one never amounted to a thing. The steady one died recently and left his widow nearly a million dollars. It's a great moral."
"Sure is. I heard the clever one is going to marry the widow."



The young man was being married. "With all my worldly goods I thee endow—" he repeated after the minister. "Good heavens," said his father, "There goes his hot rod."

Department head to clerk: "I wouldn't wake you, Jones, if it weren't important. You're fired."

A father gave his son a quarter and a nickel for the church collection and told him to put in whichever he wanted to.
When the plate was passed the father noticed his son hesitate and then put in the nickel. He asked him why and the little boy answered: "The Bible says the Lord loveth a cheerful giver, and I know if I put in the nickel I'd be much happier."



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FOR YOU

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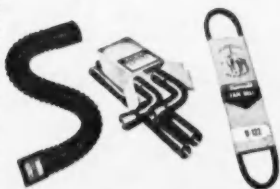


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